```
<400> 3231
ggaggcagga ggaggggctg ccacctgtgg tggatgccat tgatgacgcc tctgtggagg
                                                                       60
aggacttggc agtcgctgtg gcaggtggcc ggttggaaga agtgagcttc ctacagccct
                                                                      120
acccageceg gegacgtega getetgetga gggetteagg tgtgegaagg ategateggg
                                                                      180
aggagaagcg ggagctgcag gcactgcgcc aatcccggga ggattgtggc tgtcactgcg
                                                                      240
ataggatetg egaceetgag acetgeaget geageetgge aggeateaag tgeeagatgg
                                                                      300
accacacage atteceetgt ggetgetgea gggagggetg tgagaacccc atgggeegtg
                                                                      360
tggaatttaa tcaggcaaga gttcagaccc atttcatcca cacactcacc cgcctgcagt
                                                                      420
tggaacagga ggctgagagc tttagggagc tggaggcccc tgcccagggc agcccaccca
                                                                      480
gccctggtga ggaggccctg gtccctactt tcccactggc caagcccccc atgaacaatg
                                                                      540
agctgggaga caacagctgc agcagcgaca tgactgattc ttccacagca tcttcatcag
                                                                      600
catcgggcac tagtgagget cetgactgee ceacceacce aggeetgeet ggeeetgget
                                                                      660
tccagcctgg cgttgatgat gacagcctgg cacgcatctt gagtttcagt gactctgact
                                                                      720
tcggtgggga ggaggaggaa gaggaggaag ggagtgtggg gaacctggac aacctcágct
                                                                      780
gettecatee agetgacate tttggtacta gtgaccetgg tggcctggcc agetggacce
                                                                      840
acagctattc tggctgtagc ttcacatcag gcatcctgga tgagaatgcc aacctggatg
                                                                      900
ccagctgctt cctaaatggt ggccttgaag ggtcaaggga aggcagcctt cctggcacct
                                                                      960
cagtgccacc cagcatggac gctggccgga gtagctcagt ggatctcagc ttgtcttctt
                                                                     1020
gtgactcctt tgagttactc caggctctgc cagattatag tctggggcct cactacacat
                                                                     1080
cacagaaggt gtctgacagc ctggacaaca tcgaggcacc tcacttcccc ctgcctggcc
                                                                     1140
tgtctccacc tggggatgcc agcagttgct tcctggagtc cctcatgggc ttctccgagc
                                                                     1200
cageegeega ageeetagat ecetttattg acageeagtt tgaggacact gteecageat
                                                                     1260
ctctaatgga gcctgtgccg gtgtgaggac caggatgtct tttcccagcc ccaagagacc
                                                                     1320
tgttgctgct ttcttgtaat tatggggctc cccagagtct gcgtaacagt ctcccactgg
                                                                     1380
ctggctcacc cacaggtgcc atgtgcacac tcctggtttt caaacaattc tctggattta
                                                                     1440
tttatttgtt ttaacttttc tgtgctgaag agaggactag ggggaggggg cttccccttt
                                                                     1500
cagctgcccg gccccccaca cccacagctt gctcttctat ctccacaacg tgagcctgga
                                                                     1560
agaggagaaa atgtggctcc tctggagctt ggcagaccac ttttcggtct ttgcgtgatg
                                                                     1620
tteettagee caaagaeggt gagaeaggge tgaaateagg tggettetge eaccetgage
                                                                     1680
cctagaccca tgggtggcta aatccactgg actgtgaaga ctataattta tttccataat
                                                                     1740
ttatttggag attgaggagg ctttggttgc acttetttgg ctggtgggta atgccagggg
                                                                     1800
tggggtgggc acaggccctc aagagcccct tttgccttgt agtcctacac cttgccctgc
                                                                     1860
ctgggctttg gtgcagacta ggtgtggatt tgagctctgt gatctatgtc tgctgcctgg
                                                                     1920
ctcctagatg gctctgcggg caggtgctgg ccaaggacat catctaggca gggggagagc
                                                                     1980
ctgggctgaa cagctgtgac caaaactccc ttctgcccca ccctgccccc tccacttcct
                                                                     2040
geeetetgtt ceatetteee eetteeeaaa ggeeacagee tttatteeag geeeagggat
                                                                     2100
gtaggaggg gaaggaggaa acaggaagcc cagagagggc aaagggccta cctcggggcg
                                                                     2160
cgaaccatgc cccagactat tatctcaggg ctttctgggc actgcacttc agcgtggccc
                                                                     2220
acctgcccat gccctgaggc cagttggcga ggggtggctc ctgagggttt ttataccctt
                                                                     2280
tgtttgctaa tgtttaattt tgcatcataa tttctacatt gtccctgagt gtcagaacta
                                                                     2340
taatttatte catttetete tgtgtetgtg ceaagaaacg caggetetgg geetgeedet
                                                                     2400
tgcccaggag gccttgccag cctgtgtgct tgtgggaaca ccttgtacct gagcttacag
                                                                     2460
gtaccaataa agaggettta tttttaaaaa aaaaa
                                                                     2495
```

```
<210> 3232
<211> 958
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (3)...(53)

<223> similar to gi2828710 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3232
cccggaattt ccgggtcgac gatttcgtcg ctgagcttaa actgaagcaa gttcggtgga
                                                                       60
cgccggcggc gccctgatct aaagaaacga ctcagggact gcggcgcttg cacgtcaacg
                                                                      120
ggaggtgtga gcccaaaggt ctggacccag aaatgggacg tcggtcatca gatactgaag
                                                                      180
aagaaagcag aagcaagaga aaaaagaaac accgtagacg gtcctcctcg agcagttctt
                                                                      240
cagatagtag aacatacagc cgaaagaaag gaggaaggaa atcaagatca aagtcaagat
                                                                      300
cttggtccag agatcttcag cctcgttcac attcttatga tagaagacgc aggcatcgat
                                                                      360
caagcagtag ctcttcttat ggctccagaa ggaaacgaag tcgaagtcgt tcaaggggtc
                                                                      420
gagggaaatc ctatagagtt cagaggtcta ggtcaaaaag cagaacaaga aggtccaggt
                                                                      480
caagaccteg teteegttet catagtegta geagtgaaag gteeagteac agaagaacge
                                                                      540
gtagtcggtc tcgggataga gaacgacgta agggcagaga taaagagaaa agagaaaagg
                                                                      600
agaaggataa agggaaggac aaggaattac ataacatcaa acgtggggaa tctggaaaca
                                                                      660
tcaaagctgg attagaacat ctgccaccag ctgaacaggc caaagccaga ctacagctgg
                                                                      720
ttcttgaagc tgctgcaaaa gctgatgaag cattgaaagc caaagaaaga aatgaggaag
                                                                      780
aagcaaagag aagaaaggag gaagaccaag ccaccctggt agaacaagta aaaagagtaa
                                                                      840
aagaaattga agctattgaa agtgattett ttgtteagea gacatteaga teaagtaaag
                                                                      900
aagtcaaaaa gtcagtggaa cctaatggag tgaaacaggc acctttaaca tcaggacg
                                                                      958
```

```
<210> 3233
<211> 748
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (71)...(651)
<223> similar to gi5732634 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<400> 3233
tttcgtgcaa agaaaactgt gagagagaga atttttaaaa agcagctggg gcctgaggtt 60
tctcccccag taccctgggt cacctcagcc cagagctggc ggcaggcccc cagcccctca tgtcagagcc ccctgtgtac tgtaacctgg tggaccttcg ccgctgtcct cggtcccac 180

ccccaggccc tgcatgcccc ctgctgcaga ggctggatgc ctgggagcag cacctggacc 240 ccaactctgg acgctgcttc tacataaatt cactgactgg ctgcaagtcc tggaagcccc 300 cgcgccgcag tcgcagcgag acgaaccctg gctccatgga ggggacacag accctgaaga 360 ggaacaatga tgtcctgcaa cctcaggcaa agggcttcag atctgacaca gggaccccag 420 aaccgcttga cccacagggt tcactcagcc tcagccaacg cacctcgcag cttgaccctc 480 cagcettgca ggeceetega cetetgeege ageteetgga egaceeceat gtgaacetee 540 cattletttg tgaaggecaa gateeteect geeceeete eeeetttte etgeteeaca 600 taaacatett eetettetg aatateetee taeecageee teeeceagea aetttaaggg 660

acttcactcc tgggagaccc cctagggaaa gccgtggcca ctatggaggg cgagggtgat 720 tacagatccc attcccta cttcccag 748

```
<210> 3234
<211> 1938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (183)...(985)
<223> similar to gi193527 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3234 cgaaaaggag gtcctgtctt cggggagaaa cattctaaat cacctgccct ctcttcctgg 60 ggggacccag teetgetgaa gacagatgtg ccattgaget cagcagaaga ggcagagtge 120 cactgggcag acacagaget gaacegtege egeeggeget tetgcagcaa agttgaggge 180 tatggaagtg tatgcagctg caaggacccc acacccatcg agttcagccc tgacccactc 240 ccagacaaca aggteeteaa tgtgeetgtg getgteattg cagggaaceg acceaattae 300 ctgtacagga tgctgcgctc tctgctttca gcccaggggg tgtctcctca gatgataaca 360 gttttcattg acggctacta tgaggaaccc atggatgtgg tggcactgtt tggtctgagg 420 ggcatccage atactcccat cagcatcaag aatgcccgcg tgtctcagca ctacaaggcc 480 agecteactg ccaettteaa cetgttteeg gaggeeaagt ttgetgtggt tetggaagag 540 gacctggaca ttgctgtgga ttttttcagt ttcctgagcc aatccatcca cctactggag 600 gaggatgaca gcctgtactg catctctgcc tggaatgacc aggggtatga acacacggct 660 720 aggteettgt acaaggagga gettgageee aagtggeeta caeeggaaaa getetgggat 780 tgggacatgt ggatgcggat gcctgaacaa cgccggggcc gagagtgcat catccctgac 840 gtttcccgat cctaccactt tggcatcgtc ggcctcaaca tgaatggcta ctttcacgag 900 gcctacttca agaagcacaa gttcaacacg gttccaggtg tccagctcag gaatgtggac 960 agtotgaaga aagaagotta tgaagtggaa gttoacaggo tgotcagtga ggotgaggtt 1020 ctggaccaca gcaagaaccc ttgtgaagac tctttcctgc cagacacaga gggccacacc 1080 tacgtggcct ttattcgaat ggagaaagat gatgacttca ccacctggac ccagcttgcc 1140 aagtgeetee atatetggga eetggatgtg egtggeaace ateggggeet gtggagattg 1200 tttcggaaga agaaccaett eetggtggtg ggggteeegg etteeeeeta eteagtgaag 1260 aagccaccct cagtcacccc aattttcctg gagccacccc caaaggagga gggagcccca 1320 ggagccccag aacagacatg agacctcctc caggaccctg cggggctggg tactgtgtac 1380 ccccaggctg gctagccctt ccctccatcc tgtaggattt tgtagatgct ggtaggggct 1440 ggggctacct tgtttttaac atgagactta attactaact ccaaggggag ggttcccctg 1500 ctccaacacc ccgttcctga gttaaaagtc tatttattta cttccttgtt ggagaagggc 1560 aggagagtac ctgggaatca ttacgatccc tagcagctca tcctgccctt tgaataccct 1620 cactttccag gcctggctca gaatctaacc tatttattga ctgtcctgag ggccttgaaa 1680 acaggeegaa cetggagge etggatttet ttttgggetg gaatgetgee etgagggtgg 1740 ggctggctct tactcaggaa actgctgtgc ccaacccatg gacaggccca gctggggccc 1800 acatgotgac acagacteae teagagacee ttagacactg gaccaggeet ceteteagee 1860 ttctctttgt ccagatttcc aaagctggat aagttggtca ttgattaaaa aaggagaagc 1920 cctctgggaa aaaaaaaa 1938.

```
<210> 3235
<211> 2186
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2175)...(1949)
<223> similar to gi288145 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3235 cggataaaga cgctgggaga ttgacatgca tttcgaccaa tagcattgca gagaggcgta 60 teatttegeg gatgtteeaa teagtaegea gagagtegee gteteeaagg tgaaagegga 120 agtagggeet tegegeaeet catggaatee ettetgeage acetggateg etttteegag 180 cttctggcgg tctcaagcac tacctacgtc agcacctggg accccgccac cgtgcgccgg 240 gccttgcagt gggcgcgcta cctgcgccac atccatcggc gctttggtcg gcatggcccc . 300 attogcacgg ctctggagcg gcggctgcac aaccagtgga ggcaagaggg cggctttggg 360 eggggtecag tteegggatt agegaactte caggeceteg gteaetgtga egteetgete 420 tetetgegee tgetggagaa eegggeeete ggggatgeag etegttaeea eetggtgeag 480 caactettte ceggeceggg egteegggac geegatgagg agacacteca agagageetg 540 gecegeettg eeegeeggeg gtetgeggtg cacatgetge getteaatgg etatagagag 600 aacccaaatc tccaggagga ctctctgatg aagacccagg cggagctgct qctggagcqt 660 ctgcaggagg tggggaaggc cgaagcggag cgtcccgcca ggtttctcag cagcctgtgg 720 gagegettge etcagaacaa etteetgaag gtgatagegg tggegetgtt geageegeet 780 ttgtctcgtc ggccccaaga agagttggaa cccggcatcc acaaatcacc tggagagggg 840 agccaagtgc tagtccactg gcttctgggg aattcggaag tctttgctgc cttttgtcgc 900 geceteccag eegggettit gaetttagtg actageegee acceageget gteteetgte 960 tatotgggto tgotaacaga otggggtoaa ogtttgcact atgacettca gaaaggcatt 1020 tgggttggaa ctgagtccca agatgtgccc tgggaggagt tgcacaatag gtttcaaagc 1080 ctctgtcagg cccctccacc tctgaaagat aaagttctaa ctgccctgga gacctgtaaa 1140 gcgcaggatg gagattttga agaacctggt cttagcatct ggacagacct cttattagct 1200 cttcgtagtg gtgcatttag gaaaagacaa gttttgggtc tcagcgcaqq cctcaqttct 1260 gtataggcaa tgctgtgtta ttacttgaat atagaatata tagtttacaa aatgaaaatt 1320 ccaatgttet caccaaatat atgeettegt gtgtecaaag tataattatt ttagatgeta 1380 attttgaata gtttattaaa cagttataaa tatgcaaagt agctggcatg tagtgtcacg 1440 gattttctgg atagaggaag tgattggaag tattccactt aaagccatgg aattagcaat 1500 agtttgettt ttaatagaag geeeatttgt aagaatgttg aaaatatgtg taeegtttaa 1560 agaaaaagca gctttaaagt gacaaacaaa ataccctttt tcttttagta tgggttattt 1620 ttetaggttt tetgteeete eeteagtagt gaagagtttt etttatteet ggeagtgtea 1680 ggaatattgg titgaaaagc tgitggccta tctggagttt ggccttgita acctagtatt 1740 ctaaccagtt aaccagcett agtatgeatt aaaattgtat tgttcagaaa gtttgtttct 1800 cattttctgc aaattcttac tttgaaaatg aatcaccaca tagtatgtcc ctttaaagca 1860 ttgacgcaca gacaaatgtt taaagcacag taaatacaaa tatatgcctt tggatattaa 1920 attaatgett gatgataaaa gaatcaaact ttttttttt tgaaagggag tetegetttg 1980 teacceaaac tggagggeag gggggggate actgttaagg geaacetttg ceteceagga 2040 tcaagcaatt ttgactcacc ctcccaagta gctgggatta caggggcagg ccaccatgcc 2100 cggctaattt tttgtatttt tagtaaaaac ggggtttaac catgctggcc aggctggtct 2160 caaacacctg accttgggat ccgtcc 2186

```
<210> 3236
<211> 1257
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1258)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1210)...(840)
<223> similar to gi930045 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3236 ttttttttt ttcagactta ttaaacatga tttattactt ttgggacagg gagacgggga 60 gaaattgata gaccaataaa tattgcacaa ggctgctggt ggtgggggag atccagaccg 120 aggtgagttt ctgtagaaag ggtgaaagac ctgggcgagg aaggcacctg aggttgccgq 180 gagccaggtt gggagcgagt cttggtggcg agggtggttt ctggttcacc tacctagcac 240 aaggteteca acteetteag cetagacaee etgateagea getgaceagt tggeetgeea 300 tttaagcagc agcaattgat agcaagatca ggtttccttt agaaattctt attggttcct 360 tecetgeage gacaacegge tgeccaaagt tgatggaace cagcagetgt cactggacqt 420 ttgccaggag gcagggctaa cggccttggt gcacatgatg ggcagtttgc ccggagcggg 480 ctgaaaaaga caatgatata tagtctcggg agggcgcagc tttaactctt ctacctggcg 540 gtttacagaa gccagagctg agcagctgtg attggcagac accetcaget cetcagecaa 600 accacacttg gatgtttatg gtgagggtgg gactaagaaa tggaacagaa gcagagctaa 660 atégetttga ttggetgtte ategaagggg eggggaagae ttaacaactg etágetgett 720 tgattggctg ctttgcttaa gcacacagtg cagcaaaaat aatcacctgt cagttattgg 780 aagttggagt gaaaagtata ataaccgtaa ttgacagcct gtcgtgaagg aggcggggct 840 tagtteetag cetgetgaet gggeagggag gtaggtteta eteaggagat gttactgetg 900 ggcgtggctt gcgggggctc ggaagtgatc ggagccactg ggtctagttt ggggaaaccc 960 gggggtgggt acaatcccat gctgggggtc agggcctqca qatqcqccaq qqcccqaqtt 1020 ccgttgaagg tcacctcaca gcctgacttg gctaggagcc agttctccac ctccgaccgg 1080 agceacetgg aggtetette gggegageet tgagtgeece etggeegeeg ggeeaqgaaq 1140 etgtgageea geagegeete ettggtgtge tegteetgeg egegeaggge cagggegatg 1200 agcageteeg gaatteenee genetgaeta aggteteaaa annenagggt gatetat 1257

```
<210> 3237
<211> 759
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (150)...(684)
<223> similar to gi1532033 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3237 tttcgtccag gacgaggtgg ccaggcggcc cccatggcgt ccctggtcta ggcggagaac 60 cgcctgggcg atgagtgaga acctcgacaa cgagggcccg aagcccgtgg agagctgtgg 120 ccaggagage ageagtgeee tgagetgeee tacegteteg gtgeeeeetg cageeeegge 180 agceetggag gaggtggaga aagagggege tggggggget acagggeegg ggeetcagee 240 egggetetae agetaeatea gggatgaett gtttaeetet gagatettta aactggaget 300 gcagaacgtg cctcgccacg ccagettcag cgacgtccgg cgettectgg gccgctttgg 360 tetgeageee cacaaaacea aactetttgg geaaceacee tgegeetttg tgacatteeg 420 cagcgctgca gagagggaca aggccctgcg cgttttgcat ggtgccctct ggaaaggccg 480 eccaeteagt gtgegeetgg eccggeecaa ggeegaeece atggeeagga ggaggegaea 540 ggagggtgag agtgagccac cagtaacacg agtggccgac gtggtgaccc ctctatggac 600 agtgccctat gctgagcagc ttgagcggaa gcagctggag tgcgagcagg tgctgcacaa 660 acttgccaag tgagtgtggg cgcaaaacaa ccctcttggc cagggctctg cccggcctgt ` 720 getteetgag cetgteegaa tteeacegeg ttttteag 759

```
<210> 3238
<211> 2183
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(294)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3238 ttttttttt ttgagacgga gtctcgctct gtcgcccagg ctggagtgca gtggcgcgat 60 eteggeteae tgeaagetee geeteeeggg tteaegeeat teteetgeet eageeteeeg 120 agtagctggg actacaggcg cccgctacca cgcccggcta attttttgta tttttagtag 180 agacggggtt teacegtgtt agecaggatg gtetegatet cetgaceteg tgateegee 240 gcctcggcct cccaaagtgc tgggattaca ggcgtgagcc accgagccg gcccaagaga 300 ataggggagc caaggaggaa atgtggaaac gcagttgtgt ggcccagcac gagcctgggc 360 gaccaceggg tgacateegt eccacateag ggeggeetee eaggteecat aagggtagee 420 ccctcatctg caggacagag ggaagccagt cagggccccc ccggacgtta ggaccaggag 480 aaatcaacag gagggcagcc cgtcctctct cttggggcgc ccacccggcc cggctgagcc 540 ctgccccacc caactccaca gggctgtttt gcctccccac ggaaggcggg ctgaggagac 600 aaccagatca ggagagcaag gtcatgaagg aggggacctc tccacacagg tgttccgtgg 660 gacceteage agetetgget etgeeteagg aggteacetg eegecetgtg ggageegeag 720 agectgaege teageceeag gecagetgeg gecaggeetg egggeeeetg gtgatggggt 780 tacgtggggt gcgggataca gctgagtggg aaccggaaac ctattctctt tttaacaaaa 840 ataatcttag gataagaatt attttaacaa catataaaac tgtttcaagc cctcctcccc 900 agagetggeg eteageagee etageggetg eteetteagg egaagggtgg titgeagatg 960 tggggagggt gtctggggac gttgctgagc tggctgcaga agggtgggga tatcagggca 1020 cagtetecat gtgtgtgeca agecetggee eccaeagege tegatggace teageaaget 1080 geccageeet ggeecaggtg ceeegaetgt gggaeteagt tgttetgage acatttgaet 1140 ccacttttcc tttaaaaatg aatgtcttgt tcctgtgcat tggtggcatc acagacccca 1200

```
getggggege gatgteaaag gtegggaeag etgtgeeggg aggeageeac agggaagete
                                                                     1260
                                                                     1320 -
acacatectg teagtgteac ettggtttge aaaacecata teeceggtaa aatgaggeeg
gacagagggg ctgttaggac agcaaagcag cagtgtccag agacccctca atccccaaag
                                                                     1380
gtccgcaccc tgtcctgcac accctgggcc acgccggcca cacccctctg ctgcaacaag
                                                                     1440
ctcatccctg gacttctggg agaatgaacc cgaggttggt ttggggagac aggtgaggcg
                                                                     1500
gttggatcta cagaacaacc caccatttct gggggccgca gaggatccat cacagacgga
                                                                     1560
tactggggag taaacggccc aggccaggtg cccaggaaag gacggctgag catgtggagc
                                                                     1620
gagagggagg caggtggacg ctgcagaccc caggttcagt gcggcccctc ggctgttcct
                                                                     1680
eccetgtagg gtttggacag acceaecece ageettgeee agettteaaa ggacaaaagg
                                                                     1740
gagcatcccc cacctactct caggtttttg aggaaacaaa gatttgtggt aactgaaggt
                                                                     1800
gttgggtcag tggccaggtg ccgacactga gctgtgaccc agaggggacg ctgaggaagt
                                                                     1860
gggcgtgagt ggacatgtca ggtggttacc aggcactggt tgttgatggt cggtggttgg
                                                                     1920
gtgtgggcag tcatcagtca tcaggtgtgc tcaggggaca atctcccctc aaccgcacat
                                                                     1980
gtgccactgt tcagcggagc tgactggttt ctcctggtag agggccggct gtatcctgac
                                                                     2040
agatgcctgg tgagcagggg aagcaggacc cagtggtcaa caggtgtctt taactgtcat
                                                                     2100
tgtgtgtgga atgtcgcaga ctcctccacg tggcgggaat gagctgtgta aatacttcaa
                                                                     2160
taaagcctga cttcacatct gca
                                                                     2183
```

```
<210> 3239
<211> 2483
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2421)...(1347)
<223> similar to gi3165570 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3239 .
gagtgatacc tgactcctcc agaacccttc agggcaggca ttttattcat catttatttt
                                                                       60
aaaaataact gggagtcaga aacagatgct aagaggaggc acattcttca agttttctaa
                                                                      120
aagaaccett tetaetttgg ataggacaaa aatgagettt ggetgaatga actgagacta
                                                                      180
gacataagaa ggactgagct gctgatgagt tatgaatgga agactaacac gcagtctcaa
                                                                      240
ggcaggagaa gaagaacatg tgctgttttc ctgggagtgg ggcaactggt ggtggctgtg
                                                                      300
agaaggcaga gctcttcaga ggggacagcc aagaacaggt agtcactggg ggccctattt
                                                                      360
agectgagaa tgeaggaggg attgttttat ggggteetee etgeeeetea agacaeeett
                                                                      420
cegececate eccaecag ggtgetagag aagataggaa tatagatttt aateattgtg
                                                                      480
etgetgetat taaccagagt geaattaate catettttgt ggattttgat gecacagtgt
                                                                      540
aaatgagagg gtttcacaca gaaacactct gggggccttc ggtgacaaaa gggctaggcc
                                                                      600
tctggtgggg agggggtggc aaaaggtgaa gtggaattag gagagatgtg gggagcagac
                                                                      660
ccagggctgg gagactgctc cttccccatc acacatgccc atcaaggacc ccaagaggaa
                                                                      720
gggattette etgecatgge etgggetgte caagtgagee tgaetteeet tecaaggeag
                                                                      780
ctgcctctag cttcatgtcc aattctcgct gagtagatga ggtccagggt aggcccacag
                                                                      840
ttgaccacca aatggtgaag agatataagc caagggagaa gaaagtggtt tggaaccccc
                                                                      900
aatcattete cattttteat eetaagetae ettaaaaeta gtteagaget ggggaaagae
                                                                      960
agcaacagca gtctatcctc tcggtcagaa ctgctctacc tgcctcctgg agatgggggt
                                                                     1020
ggggggaggt gggactcaca ggagggagag gtaggaaata ttcctgtgcc tttctttgcc
                                                                     1080
tgtgcagtaa gtgaagactc tcttcagagt cagctctgca gctggtggag tcatctgtgc
                                                                     1140
ctcttacagt tttctgagat tggtaggatt tggagctata gagaggtcaa cttagagccc
                                                                     1200
```

```
caaggccaga ctccactggt tgctaacagg agctgacatt cttggaagta gccccgactg
                                                                     1260
cttggacaag atcattcctc atgttaagag tgaagtgata tggtccaggg caaaggtact
                                                                     1320
                                                                     1380
gagcccagag acagctagga gtcagagaca cacagggcct ccactgcgtc actcagaccc
tggttgacac ctcccacggc gaggaggcag ttcttgacga ctatgctgga gcaggcacag
                                                                     1440
                                                                     1500
cggggtgtgg gcatggcagg gaggatetec catttgttet tecetgggtg gaatgettee
geegteteea ggaeagtggg ttgatteeea agteeeeeag eeactatgae eegteeaete
                                                                     1560
agagagecag ceacaaaate tgeeegeege ttettgagga agaaegateg ttecatette
                                                                     1620
agceateece cetgiteeat giegaacaeg tecategiee geaggaacit gggetgeegg
                                                                     1680
tagaggegae ettgeegeag geeteetagg etgtacaagt ggttgteeag ggteacaaag
                                                                     1740
ctggagaagg cccgcttata gggaatgttg ggaaacttgg tccaggagcg agtctcgatg
                                                                     1800
tcaaagacct cgaaagcgtt gaccgcgtac ttggactgtc gtccccccag cacgtagatc
                                                                     1860
ttggageete ggaggaagga ggtggeagea tatetegggg tgggeatggg tgetagggae
                                                                     1920
acccacatgt cetteageat gteatagtgt tggaggtggt tgtgtggaeg taggteeagg
                                                                     1980
eccatecege etgeegeata taeteggtaa tetttggeeg tgaeagaaat geccatggeg
                                                                     2040
gcctcacgca gcatgctcct cttcttccac ttgccctcat cgatgttgta catctccacg
                                                                     2100
accttcaggg gcagctgatt ggtgcccacg cccccaatca ccatgatccg cttccccagg
                                                                     2160
geggtgaegg ceaeceege eegggetgtg ggeageeggg geaaggeggt ceaetggteg
                                                                     2220
gcctccgggg agtagacctc gaagcagtcc atggggacgc cgttgtcgtc acatcccccg
                                                                     2280
atggcataga cctggccccc ggtctccagc agggagcagt agacccggcg gctgggcagt
                                                                     2340
ggcgccaggc gcttccactg gaagtccttg acgttaggca cctccatggc agccttgggg
                                                                     2400
agegeeeggg egeegggaga gttgegageg egggggteea eeggetaett ggegeegget
                                                                     2460
cccacggccc ctatcgcact aaa
                                                                     2483
```

```
<210> 3240
<211> 2451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(1567)
<223> similar to gi2827886 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400>.3240
tttcgtcacc caggcagtcc ctgacgtgtc ggggaggagc cgggcgcgga ggtacgctga
                                                                       60
gtggageteg gggetgegta ggggagetga geegagegge tgggegggee tggeegggee
                                                                      120
agcggagggg agacgtcggt tgagcggcgg cgaacatgcg cttttgacac attggaggct
                                                                      180
ttettgatea tggatggtga agatatacea gattttteaa gtttaaagga ggaaaetget
                                                                      240
tattggaagg aactttcctt gaagtataag caaagcttcc aggaagctcg ggatgagcta
                                                                      300
gttgaattcc aggaaggaag cagagaatta gaagcagagt tggaggcaca attagtacag
                                                                      360
gctgaacaaa gaaatagaga cttgcaggct gataaccaaa gactgaaata tgaagtggag
                                                                      420
gcattaaagg agaagctaga gcatcaatat gcacagagct ataagcaggt ctcagtgtta
                                                                      480
gaagatgatt taagtcagac tcgggccatt aaggagcagt tgcataagta tgtgagagag
                                                                      540
ctggagcagg ccaacgacga cctggagcga gccaaaaaggg caacaatagt ttcactggaa
                                                                      600
gactttgaac aaaggctaaa ccaggccatt gaacgaaatg catttttaga aagtgaactt
                                                                      660
gatgaaaagg aatctttgtt ggtctctgta cagaggttaa aggatgaagc aagagattta
                                                                      720
aggcaagaac tagcagttcg ggaaagacaa caggaagtaa ctagaaagtc ggctcctagc
                                                                      780
tetecaacte tagaetgtga aaagatggae teegeegtee aageateact ttetttgeea
                                                                      840
gctacccctg ttggcaaagg aacggagaac acttttcctt caccgaaagc tataccaaat
                                                                      900
```

```
ggttttggta ccagtccact aactccctct gctaggatat cagcactaaa catcgtgggg
                                                                        960
  gatctcttac ggaaagtagg ggctttagaa tccaaattag cagcttgcag gaattttgca
                                                                       1020
  aaggaccaag catcacgaaa atcctatatt tcagggaatg ttaactgtgg ggtgctgaat
                                                                       1080
  ggcaatggca caaagttctc tcgatcaggg catacatctt tcttcgacaa aggggcagta
                                                                       1140
  aacggetttg acceegetee teeteeteet ggtetggget eetegegtee ategteageg
                                                                       1200
  cegggtatge tgeeteteag tgtgtgagtg cetageetee aggtggggge teetgeeete
                                                                       1260
  etccaacaac ccaggacacc cacgcetcac cceteggtge etgggeccag eccegtgece
                                                                       1320
  ctccgtctgc ctccgcacgg ctggcagagg gcaggctgca tgcagtggcg gctactgggc
                                                                       1380
  cctgcccagc cccggaactc tgcgcgatat caatactggc tattttctct tctcgccgta
                                                                       1440
c gtgccgttgg tttcacatga ttgcactttt gtgggtcgca aggtgataca tacgtgtatt
                                                                       1500
  acttggtcac tggatgcaga agtacccatt catcacacct gccccatagc ccccactctg
                                                                       1560
  ctgtactgat aggatttagt tgtgttttag gacattgcaa atcttctaga agttctcccc
                                                                       1620
  caaatcaggt caatgtgtgc cctcctgagc tcccacccag gcatctccag tgctcatgat
                                                                       1680
  catgtgtccc ccaactccac ccctcacagt ttgggcctgt ttctggcaaa gagtcaggaa
                                                                       1740
  ggttactgaa ttagggaaca ttttctgcac cttctgattt tacttaagca gctaccattc
                                                                       1800
  catggacttg cctcccagag cagcacaatg cccgtctgag ccccacgtgg caggagcctc
                                                                       1860
  tgggacgggg cacacacagg cccagcetet gtgetgtete etectetgtg egeeteagae
                                                                       1920
  teggggtgag ggaggeggge ageetetege cageetteee gteetteagt teaaegaeat
                                                                       1980
  etttggagtg tttttgtttt etetteeaag ggeegteeeg ttgtgttagg aagggtgagt
                                                                       2040
  ggctggttcc agggtgggcc ggtgccagct ccggggtgga ctgaacagcg gcggctgtcc
                                                                       2100
  ctgtgcatcc tttgattact ctcatgctgc atttactgtt tacatttgtt ttattgtaca
                                                                       2160
  taggtttgta aacattattg cctgagatat ttgtatataa cttgggcttt gtagctttta
                                                                       2220
  tttattcaga acgcatacgg catgttaatg actctgatgg tgtcctcctc tgggcagctg
                                                                       2280
  tataggatca tcatgtggtt acaaaaaata cttccctcaa aaaaattctt ttaatgtgga
                                                                       2340
  aacaataaat ttcacagaaa aaaaaaaaa gggggggccg ttttaaagga tccttggggg
                                                                       2400
  ggcccaagtt tacccgggct tgcaaggtaa tagcttttc cttataggga g
                                                                       2451
```

```
<210> 3241
<211> 1124
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (360)...(926)
<223> similar to gi5478530 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3241
gtccggagtt cccgggtcga cagtctccca gaacaattcc caggagctcg gattccaaga
                                                                       60
geogeocttg coetegitta cettegotag tegecetgea geocegecet gteeggagge
                                                                      120
cccgccctcc atgaatcagc tgatcccgcg gacccactgg gttgccaagc tcgcgccgga
                                                                      180
tgcggagcgc ggtgctgccg gtggagcttc aggtcttgat agactttctg taaagaagga
                                                                      240
atgatttggt gatggagtgt tcccactgac cgatggactc aaagaagaga agctcaacag
                                                                      300
aggcagaagg atccaaggaa agaggcctgg tccatatctg gcaggcagga tcctttccca
                                                                      360
taacaccaga gagattgcca ggctggggag gaaagactgt tttgcaggca gccctcggag
                                                                      420
tgaaacatgg agttcttctg actgaagatg gtgaggtcta cagctttggg actcttccct
                                                                      480
ggagaagtgg accagtggag atttgtccaa gtagccccat tctagaaaat gccctggttg
                                                                      540
ggcaatatgt tattactgtg gcaacaggaa gcttccatag tggagcagtg acagacaatg
                                                                      600
gtgtcgcgta catgtgggga gagaattctg ctggccagtg tgcagtagcc aacccgcagt
                                                                      660
```

```
atgtgccgga accaaatcct gtccgcattg ctgattctga agccagccct ttgttagcag
                                                                      720
tcaggatttt acaaatggcg tgtggcgagg agcacactct ggcattgtca ataagcaaag
                                                                      780
agatttgggc atggcgtacc ggctgtcaat tgggtctcat taccactgcc tttccaggga
                                                                      840
caaagccaca aattgttgaa catcttgctt ggcgagaggc gctctcaact gcctgtgggg
                                                                      900
ettecacaat taggeettgt teaatgeete eettecaggt attgaageag teecaaaace
                                                                      960
atgcaacaat gcactcccct ttgagtacta ttactgacaa aaatcacctg gaatttttgg
                                                                     1020
accgcgttgg tggcccttag ggggacactg acaaaccttt ggagaaagac atgcggcctt
                                                                     1080
gtcttagccc ctcactggaa ccctcacggc agaaaaaat tgct
                                                                     1124
```

```
<210> 3242
<211> 1173
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1174)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (50)...(1023)
<223> similar to gi915208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3242
tttcgtgggc tctggactct gtatctggaa ctggtggcgt cggcccaggt cggcgggaac
                                                                       60
cccctgaacc ggaggtacgg cagctggaga gaactggcca aggctctggc cagcaggaac
                                                                      120
attccagetg tggatecaca cetecagtte taccatecee agaggetgag cetegaggae
                                                                      180
cacgacattg accaaggggt gagcagtaac agcagctact tgaagtggaa caagcctgtc
                                                                      240
ccctggctct cagagttccg gggccgtgcc aacctgcatg tgtttgaaga ctggtgtggc
                                                                      300
agetetatee ageageteag gaggaacetg cattteecae tgtaceecca tattegeaca
                                                                      360
accetgagga agettgetgt gteececaaa tggaccaaet atggeeteeg catetttgge
                                                                      420
tacctgcacc cetttactga tgggaaaatc cagtttgcca ttgctgcaga tgacaacgcg
                                                                      480
gagttetgge tgageetega tgaceaggte teaggeetee agetgetgge cagtgtggge
                                                                      540
aagactggaa aggagtggac cgccccggga gagtttggga aatttcggag ccaaatttcc
                                                                      600
aagccggtga gcctgtcagc ctcccacagg tactacttcg aggtgctgca caagcagaat
                                                                      660
gaggagggca cegaccaegt ggaagttgca tggcgaegga aegaccetgg agccaagtte
                                                                      720
accatcattg actecetete cetgteeete tteacaaatg agacgtteet acagatggat
                                                                      780
gaggtgggcc acateceaca gacageagec agecaegtgg actectecaa egetetteee
                                                                      840
agggatgage ageegeeege tgacatgett eggeetgace eeegggacae eetetatega
                                                                      900
gtgcctctga tccccaagtc gcatctccgc cacgtcctgc ctgactgtcc ctacaaaccc
                                                                      960
agctatctgg tggatgggct tcctctgcag cgctaccagg gactccggtt tgttcatctg
                                                                     1020
tettttgttt accccaatga ctataccege etgagecaca tgggagacce acaataaatg
                                                                     1080
tttctaccag ggaaaacgcc tacttaccaa gaccggtgag agacactgag tnggggcagg
                                                                     1140
gaaggtgacc ttgcagaggg tctgcgggac cat
                                                                     1173
```

```
<210> 3243
<211> 1308
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1305)...(947)
<223> similar to gi2707600 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3243
gtcgacgatt tcgtgtgcgt tcactcatgg gctggatcct cacgccctcc tgccctggca
                                                                       60
gcttgctgcc cgccatccct ccatcaaaat caaagctctg atgcatcctt ccgtgggact
                                                                      120
geaggtetet gtagecaatg gggttgetga getggtggag gttteeetee ateteetggt
                                                                      180
actgctgggc agagagcagg ctgcgaactg actctgcgct ccggaactgc atggacgagt
                                                                      240
taagagtgcc catgttgctc agettctcag acacattcat tccagagtct ttgctgaggt
                                                                      300
caggcatgga aaatcgggat aggtgctcct ggcgcttggc accaccatca gcagagagc
                                                                      360
ctgttgcatt agacagggcc agggattcca tggagccccg aggggtctgc tctgtgggcg
                                                                      420
tcatgtcctc tgtgtatttc agggaactga tgggatgacg ggtccgacac tgctgagtgg
                                                                      480
acaageeece tteetettee tetteeteee atatttgggg aettggatge tgeetegggt
                                                                      540
ctcactgaaa ctctgactag acatatcact gtagctctcc tgagatctca gcctccccgg
                                                                      600
gtaatagtct tctcggcatt ccttgatgaa gctgccagca tgtcctgtca tggccagtga
                                                                      660
cgagctcctt ttggggttgc tgaagtgctt gcccacatt tcgggctggg ccccagccc
                                                                      720
ttgccctcct ggactgtagg aagttctgat gttgcactgg ctgaggagct gcagagggct
                                                                      780
ctgggtctgg ttctgctcca tcttgttccc ataatggtag ggctcttccc ggctcctcca
                                                                      840
gatggggtcc cggttgaggc tgggtgtctg gctggacagg ctgagcatgt ccatctgcag
                                                                      900
tgacaggggg tetacgtegg etgacageeg gttagaacte aettgeaget ggetgtgetg
                                                                      960
gttcagcatg ggctcctccg tcttgccctt gttcttgcca attttggcac tgcgccggga
                                                                     1020
ctccttggcc ctggcattct ggaaggcgga atcagaggag tcagaaccat tggggtcttc
                                                                     1080
cccagcactg caggccccgt gagcagaata tctggccctg cttcgggagg aatggccgcc
                                                                     1140
ccaggaggga tttcttgcag tgagcacagc agaaacaggt ctcagtggca tgccagtgtt
                                                                     1200
ggccgtcata ggtcatttga ccttggtcga tacctatatg ttgggcacag gcgtcacaat
                                                                     1260
attetgeata ccaggaeteg aaacagtgge gacagtaggg gettetet
                                                                     1308
```

```
<210> 3244
<211> 1204
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1205)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3) ... (645)
<223> similar to gi643656 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3244
eccecaactg gaaacgaaac cettecetet titgaaaggt titececetn atgaaaaagg
                                                                       60
tggtgcaaga ggatccctcc tacctcccaa gtccctggac tatgaccgct tcagccgcaa
                                                                      120
cgaaccccat tgggaagggt gtccatcccc cttaacaagg tggacctgac ccagatgcag
                                                                      180
accttctgga aggatctgaa gccatgcagc gatgggagtg ggagccgagg ggagctgctc
                                                                      240
ttgtctctct gctacaaccc ctctgccaac tccatcatcg tgaacatcat caaagcccgg
                                                                      300
aacctcaaag ccatgggaca tcgggggcac atcagacccc ttacgtgaag gtatggctga
                                                                      360
ttgtacaaag gacaagcggg tgggagaaga agaagacggt gacgattgaa gaggaacctg
                                                                      420
aaccccatgt ttcaatgagt cettegeett egatateeee aeggagaage tgagggagae
                                                                      480
gaccatcate ateaetgtea tggacaagga caageteage egeaatgaeg teateggeaa
                                                                      540
gatctacctg tectggaaga gegggeeagg ggaggtgaag caetggaagg acatgattge
                                                                      600
ccgtccccgg cagcccgtgg cccagtggca ccagctgaag gcctgagtgg ggccaaggga
                                                                      660
ggcccagggg gccgagggcc caggtcccca tcatgccctc accactttat gcacaacgcc
                                                                      720
cggcctgagc cccctgccat agggagggga ggaccctgag ggctcagcca gggaggggtc
                                                                      780
ccaggactca actgggcccc gtttctagga agtaccagcc ccatccccca cagtccagct
                                                                      840
ccggggaagg ggctctggga ggcattttcc tgctttgccc cttttcttcc tgacttacta
                                                                      900
atactaaaga agttggggga gctcgagagc cagacggcca gacaggcaga cccctccaga
                                                                      960
ggcccgccca ggtgggcatg gtcccccatt ttctttaagg cagcaccctg gagtggagag
                                                                     1020
aggecaetee etetecagee eeegatgtgg acceggggag gggaggetga ggegtttgge
                                                                     1080
cccggcctgg ccaggagagg cccatcccca gggcagtttc aggtgccggc tgggccctga
                                                                     1140
atgtcgagga taggcatata gcccgttgct gcggcatgga ggtggtgccg ttccacaatc
                                                                     1200
                                                                     1204
```

```
<210> 3245
<211> 988
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (940)...(636)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3245
gtccgattct cgggagacac gcgtcgttat taacctaaaa gattctgtgt tttgtctata
                                                                       60
ttgcaaactc tttggggaag gaaaaatca actgaaaaat gaaaatgggt gcaaagattg
                                                                      120
gcaacattta tcacatattc ttagtaaaca tgaagaaagt gaaatgcaca tcaacaatag
                                                                      180
tgttaagtac tcaaaattaa aatctgatct gaaaaaaaat aaagctattg atgctgcaga
                                                                      240
acgcaaatta tatgaaaatg agaaaaatga tggtgtgctg ttgttgtaca cgtaatatac
                                                                      300
ctgagttgtt ttttggcatg atgatcagaa tcttacatta ctcagaaaac atctgtcctg
                                                                      360
caatagtcag tactattgtg ttgtaagtct cetetacaga gtaacttgca gcagtteett
                                                                      420
agcaataagt atgatagcaa ataaatagca aagaatgttt ccattctaaa tctaaaacta
                                                                      480
attagattca atcatcatta ggcaatgact tcattaggca atgaagatta acaataggta
                                                                      540
attgttaatc ttcaaaatct atcaatttac acctatttaa aaattggcat ttaatgactg
                                                                      600
```

```
ccatttgatg ggtttggtta atattctgtt cttggccggg cgcaatggct cacgcctgta 660 atccaagaac tttgggaggc tcaggcggt agatcaattg aggtcagaag ttcaagacca 720 gcctggccaa cgtggcaaaa cctcgtcttt actaaaaata caaaaattag ccaggtgtgg 780 tggcacacac ctgtagtccc agctactcag gaggctgagg caggagaatc gcttgaaccc 840 aggaggcaga ggttgcagtg agctgagatt gcaccactgc agtccagcct gagcaacaga 900 gcgagagtca gtctcaaaag aaagaaaaat attatgttct aattaccttg aaagaggaaa 960 gaaaggcttg aattgatcaa taccagtt
```

```
<210> 3246
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1234)
<223> similar to gi4405795 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3246
ggaattcaaa tgtatgagca gcaggtggtg aagctgagtg aggctgcggc tttggttggg
                                                                       60
ctttaggagc aacgggtgta tgcgcttcac ctgaggcgct acaatgacgc gctgctcatc
                                                                      120
catgacaccg teegegeegt ggatgeettg getgegetge aggattteta teacagggag
                                                                      180
cacgtcacta aaacccagat cctgtgtgcc gagcgccggc tgctggccct gttcgatgac
                                                                      240
cgcaagaatg agctggccca cttggcaact catggcccag agaatccaaa actggagatg
                                                                      300
ctggaaaaga tcctgcaaag gcagttcagt agctctaaca gccctcgggg tatcatcttc
                                                                      360
accegeacce gecaaagege acaetecete etgetetgge tecageagea geagggeetg
                                                                      420
cagactgtgg acateeggge ecagetactg attggggetg ggaacageag ecagageace
                                                                      480
cacatgaccc agagggacca gcaagaagtg atccggaagt tccaagatgg aaccctgaac
                                                                      540
cttctggtgg ccacgagtgt ggcggaggag gggctggaca tcccacattg caatgtggtg
                                                                      600
gtgcgttatg ggctcttgac caatgaaatc tccatggtcc aggccagggg cgtgcccggg
                                                                      660
ccgatcagag tgtatacgcg tttgtagcaa ctgaaggtag ccgggagctg aagcgggagc
                                                                      720
tgatcaacga ggcgctggag acgctgatgg agcaggcagt ggctgctgtg cagaaaatgg
                                                                      780
accaggeega gtaccaggee aagatecagg atetgeagea ggeageettg accaageggg
                                                                      840
cggcccaggc agcccagcgg gagaaccagc ggcagcagtt cccagtggag cacgtgcagc
                                                                      900
tactctgcat caactgcatg gtggctgtgg gccatggcag cgacctgcgg aaggtggagg
                                                                      960
gcacccacca tgtcaatgtg aaccccaact tctcgaacta ctataatgtc tccagggatc
                                                                     1020
ctgtggtcat caacaaagtc ttcaaggact ggaagcctgg gggtgtcatc agctgcagga
                                                                     1080
actgtgggga ggtctggggt ctgcagatga tctacaagtc agtgaagctg ccagtgctca
                                                                     1140
aagtccgcag catgctgctg gagacccctc aggggcggat ccaggccaaa aagtggtccc
                                                                     1200
gegigeeett eteegigeet gaettigaet teetgeagea têgigeegag aactigiegg
                                                                     1260
acctetecet ggaetgaeea ceteattget geagtgeeeg gtttgggetg tagggggegg
                                                                     1320
gagagtetge ageagaetee aggeeeetee tteetgaate ateagetgtg ggeateagge
                                                                     1380
ccaccageca cacaggagte etgggeacce tggettagge tecegeaatg ggaaaacaac
                                                                     1440
cggagggcca gagcttagtc cagacctacc ttgtacgcac atagacattt tcatatgcac
                                                                     1500
tggatggagt tagggaaact gaggcaaaag aatttgccat actgtactca gaatcacgac
                                                                     1560
attecttece taccaaggee acttetattt tttgaggete etcataaaaa teaatgaaaa
                                                                     1620
aatgggatag aaaaaaaaa aa
                                                                     1642
```

```
<210> 3247
<211> 1789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1784)...(1123)

<223> similar to gi1050797 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3247
ttttttttt ttggagcatt ccaaatttat tccttttaag gaaacctata gccactacat
                                                                       60
atgtccctga caattagacc agaaaccaaa aaaaggacaa atagaaatac tttccattct
                                                                      120
gtctatatag tagtagtttt gggggtatag atagtaaaca ctagtcaaga atactcgtct
                                                                      180
aaatatgttg gtaaaatgta gtcatcattt ggcatgtgtt ttgctttggt atataatgaa
                                                                      240
gttgagetat eccatettte ttetetatgg aatatagtea cacaaacaaa aaagatgaat
                                                                      300
ctcactagag gtgggtcttt atcagaaata tgccccaatc tagttaggta atagaaagaa
                                                                      360
aatcattttc tcctcctagg cctaagattc ttcatgtaaa aattataaga ctgaataaag
                                                                      420
atcacttcta agtttctata attcatgtag atatatcaat ttatacatca tgatgtagac
                                                                      480
agacagcaag gctatacttt ctggctccat gatgctaggc ttggccacat gacttgctta
                                                                      540
aagcacgtat gatacatgca tettttaaga gaaaaccgaa gtgtatttca tetettete
                                                                      600
tetetgetaa aacaateaca atgteecaaa agagateeet teettegeet ttgateatgg
                                                                      660
taagaagatg acacaaagca gtgtcacagc caatcaacag ctgacatccc ccaccaggaa
                                                                      720
atacatettt gttgttgtca etacagcata aactaatgaa agetaattaa atataagaat
                                                                      780
ttgctaataa ttgaggatcc gtacacaatt aaacttaaaa ccaaaaaact ctaatagaaa
                                                                      840
actcataatt taaaatgtga cataagggga aataagttaa aaagcaactt ttaaaaaatta
                                                                      900
caaaaatagt atttgtagta aaataaatgg acttaaacat gtaatagaat tttccctgtg
                                                                      960
atttctgact tgaatctttg aatgactatt ccaagtaaga ttcaacattt ttacagaatt.
                                                                     1020
gttcttcatc attaagatat tccaagatta tatttccacc attatataaa ggacaatcct
                                                                     1080
ccttagcaat ccaggtttcc aaagtatgat ccaagggtaa ggcttctcct gaagtaatgt
                                                                     1140
gacacagcct taatttctta gctgtaaatt tgttattgtc atttttaagc ctggctagag
                                                                     1200
aagcggcaaa gtctatggcc tttccaatgc tccatcggtg gcaaaagaac attggtttgc
tettetettt geteettta ggtaagaaaa eetgaaagta aattettet gtetgtggta
                                                                     1320
atgacttate gecateagea tgeatettta attteateaa tgeaacettt geagetgttt
                                                                     1380
cactattttt ggcacctttc catcgtttac ttgctgtttc tcctgtcttg gaatcaataa
                                                                     1440
tgtctttaac aagtttctga gtggcagcca ttcgaggctt tgggatttcc agtttttcac
                                                                     1500
actcatgatc tgactgatga cggtgtctca ggcaaaaatt cttctcacaa taaggacata
                                                                     1560
taactgccac aagttctctc tcagcacagt ctttgaaaga gcatgggtaa gatgtatgtt
                                                                     1620
gatetgtett cagtetetea ttgattacag teaceteagg acaaccatga gactecetge
                                                                     1680
ttctgtgttc aaggcaaaat attcctgaac aatcatcaca cacaaatgga agaaaatctc
                                                                     1740
getgeeggea atgeteeace tggeagtget geeggatgte caacteege
                                                                     1789
```

```
<210> 3248
<211> 2352
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(1238)
<223> similar to gi36603 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3248
cggctccggg agctctgtca acagtggcta cagcccgaga cccataccaa ggagcagatc
                                                                       60
ctggagctgc tggtgctgga gcagtttctg atcatcctgc ctaaqqaqct ccaqqcccqq
                                                                      120
gtgcaggagc atcacccaga gagcagggag gacgtggttg ttgttctgga ggatttgcag
                                                                      180
ctggatcttg gagaaacagg acaacaggtg gacccagacc agccaaagaa acaaaaaata
                                                                      240
cttgtggagg agatggcccc tctgaaagga gtacaggaac agcaggttcg gcatgagtqt
                                                                      300
gaagttacaa agcctgagaa agagaagggt gaggagacaa ggattgagaa tgggaagctt
                                                                      360
attgtagtaa cagactettg tggaagagta gagteatetg ggaaaatate tgaaceeatg
                                                                      420
gaggeteata atgagggete taaettggaa aggeateagg ceaageeeaa agagaagatt
                                                                      480
gagtataaat geteagaacg tgageagaga tteateeage acttggaeet gattgaacat
                                                                      540
gcgagtacac acacgggaaa gaaactctgc gagtctgatg tgtgtcagag ttccagtctt
                                                                      600
acaggacata agaaagtcct ctcttaggag agaaaggtca tccagtgttc atggagtttt
                                                                      660
ggggaaagcc tttcagagga gttcacacct cgtcagacat cagaaaatcc atcttggtga
                                                                      720
gaagccttat cagtgcaatg agtgtggcaa agtctttagc cagaatgcag gccttttgga
                                                                      780
acateteaga atteatactg gagagaaace ttatetatgt atceattgtg gaaaaaattt
                                                                      840
taggegeage teteacetta ategacatea gagaatteae agteaggagg agecetgtga
                                                                      900
gtgcaaggag tgtggaaaaa cctttagtca ggccttactc ctcacccacc atcagagaat
                                                                      960
ccatagtcac tccaaaagcc atcaatgtaa cgagtgtgga aaagctttca gtttgacctc
                                                                     1020
agacettatt egacaceaea gaatteatae tggagaaaaa cettteaagt gtaacatatg
                                                                     1080
ccagaaagcc ttccgactaa actcacacct tgctcagcat gtaagaatcc acaatgaaga
                                                                     1140
aaaaccctat cagtgtagtg aatgtggaga agccttcagg caaaggtcag gtctttttca
                                                                     1200
acatcagaga tatcaccaca aagacaaact ggcttgatga ggtgttctct ccttgtagaa
                                                                     1260
catcagagaa ggcacattga ctagcaaaca gcactttagg aaaagtcacc gtagcccact
                                                                     1320
gtggcatcag aaaattcttg ggggctgagt tggaggctcc ctgcctctat tctctcct
                                                                     1380
ttgctttcct tgaagtcagc tttggaccac aataatttca ctgtagatga tatgctagga
                                                                     1440
tcaaagttaa acagcattet tcactgcagg acatetcaga gcatgtaaca taactgcatg
                                                                     1500
attatatact ctaagcaata gagagcttca tgactgagta agagttttga agtcagcagt
                                                                     1560
gaatcaagtg cccacagatt tgcaggctta agcagaacaa gggaagattg atatttttgg
                                                                     1620
atatgetata geagetttet eetatgaaat aaaaetgatg atgtttggaa gtataetaet
                                                                     1680
ctcaaaggtg tetttaaagt acaggttaat ggtgaacatt ttcccccagt ggettcacct
                                                                     1740
cattectece actggeetta eccetteett ecceagtgga ageattttea aaageaaaga
                                                                     1800
taattttcgc tggtgaactt cagaacttgc cttcagggtt agcttcatgt aattttacca
                                                                     1860
tttcccatcc ccattcccca ccacattatg tcaagattca agttataaat taacgtttta
                                                                     1920
cttagacttt gaaagagatt tcatgagtaa tttgaatgaa ccttgctgaa ttaatctgaa
                                                                     1980
tagcaactgt ctgacttgat aactccagtg ccagtatagt ggctgctgca tagacactat
                                                                     2040
tcagtaaatg tctgatgaaa gaaattggac tttttccctt taatactgat gatgcaattt
                                                                     2100
tgaaatgttg cttgttctgg aatacttcgg aagttaaaca ataaagtcag cttggagagg
                                                                     2160
agatcatgat ctttatactg tgaatagcag aatgtcacag atgaagaata ttaaaattag
                                                                     2220
gggcgtccac tccaaaacat atcaccagag tgacaacttc agccctcagc ctctgcaatc
                                                                     2280
catatatatc ctggtcttgg gagtccatag aatactgttt ccttctaata aaggtttcaa
                                                                     2340
acaaaaaaa aa
                                                                     2352
```

```
<211> 5039
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (5040)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5040) ... (955)
<223> similar to gi3043708 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3249
agacacagat teceaagtee gtagttgtaa atageggeea gaggetagta taataceace
                                                                    60
cccccttagt aagaagtaat gcgttgcctg cacgggtaaa attggggccc ccgaagggtc
                                                                   120
180
agtattaagc atgattaaac cagtgcagaa aaataccaag tacattgggt gaacgatgag
                                                                   240
ctagctgttc tagtatttgc tttttgtaat ccagttaaga ccatcagcat atacaacctc
                                                                   300
atetetaaet caacaatgta getgeagggt aacatgtgga taccetgtgt getetaetgg
                                                                   360
cctccaaagg cattcagggg atcctcaaag atgttgggcc ccttgtgttc aaatcttggt
                                                                  420
tcaggtgcgg cctgtgcaga tcggcttttt ggtttnggtt ggtcttaagc ctggatactc
                                                                   480
agaggagaaa gatgtcnatc catatcatca tcanaatata gaactcatga agtataatct
                                                                   540
ctcaccttct ttctctttcc cctgcccagg ccctaagtta gggttcccat ccatataaca
                                                                   600
aagacttetg-gtcaggtggc atttgctate tetgggatte cetgeceatg aaagceacaa
                                                                   660
agagatttct tcttttacac accetgaage atattatgge eccageaagg etaactaaat
                                                                   720
780
agtattaagc atgattaaac cagtgcagaa aaataccaag tacattgggt gaacgatgag
                                                                   840
ctagctgttc tagtatttgc tttttgtaat ccagttaaga ccatcagcat atacaacatc
                                                                   900
atcactaact caacaatgta gctgcagggt aacatgtgga taccctgtgt gctctactgg
                                                                   960
cctccaaagg cattcagggg atcatcaaag atgttggaca ccttgtgttc aaatcttggt
                                                                  1020
tcaggtgcgg cctgtgcaga tcggcttttt ggtttggttg tcttagcctg gataccagag
                                                                  1080
gagaagatgt catccatatc atcatcaaat atagacttgg cttccacttt ctttttggac
                                                                  1140
ttttcctttg gttttacagt taagtcagca aagatatcaa tgttatcatc aaataaatta
                                                                  1200
gattcccaat gttttctcct tctctctggt tttctgagag ggtttaattg cttccgtagg
                                                                  1260
caaaatatat catccttgtt aagcctcaaa aatatcgttg tgttgttaat atgacatccg
                                                                 1320
tgctgactat tgggattttg tctcattctt cttgactttc tgatctgtaa agggggtcat
                                                                  1380
ecteatette caggagagga aagggatttg ttttetttge tggttttggt ttagcagaet
                                                                  1440
gaaagagatc atcatcactg ctggcctcgc ctagagcagg aaacatgggg ctctttgctt
                                                                 1500
taccacccac tggtgggttg gcaggattct ctgctatctt tgccttgggt tttgttctct
                                                                 1560
ccacagactg agatccagtg cccgtggaaa agatgtcccc agaatcaaaa aggtcagcct
                                                                 1620
cccctctgga atgacccaga gactttgcaa aggggcttct gtccactcca ggcacaggac
                                                                 1680
caccttecca aggtgcageg gcagetgcca gggcetecte agtgctgtet tetecactgg
                                                                 1740
ctgctctgag ctgtggccga tggccatttg gggaaatggc gccatcagcc cactgtgcaa
                                                                 1800
tgggtcctct ggggacgctc atgtcctcag tctcgctgga ctcctgagca gccagccgcc
                                                                 1860
tagetgeacg ggtetgeggt ctaegettee eteteatett gaeacggete ttgtttgeac
                                                                 1920
tgtgtaaggt gtctgcctga gctggaagat caaaactcac accggcctcc ccactcccgg
                                                                 1980
gaaggacagg cacactttcc agaccgtggc tecttetgtg ttcagatgaa ggaaaagcca
                                                                 2040
attctggcaa aacaggcttt acttcagaga tctgggaagc cgctgtgggc agcaaggccg
                                                                 2100
ctgggttgat cgctaaattt gcctgaggtg tttccggctt ccatatgcct ttttctttac
                                                                 2160
taccttgaat ggattcagga tgtttctggt ttttgaaaga gtcaacagag tggtcttttt
                                                                 2220
teactactet ettttetet tgtaccaaag getgggaett ggeagagetg aaaagateat
                                                                 2280
```

```
catcttcatc atccccaaac aggctcccaa cacttggctc taacagcttg gtttttttgg
                                                                     2340
tgccagcaaa aaggtcaaca tetgggtcat tgtcettttg gagettgtgg etgaaaagca
                                                                     2400
gctcttcatc ctggaagaca cctgtgctct tggggtgggc atcaggaatc gcagcccttt
                                                                     2460
cetacttett ttetgtggag cetgggataa tggttttgaa tettecaatt ttateetett
                                                                     2520
cctcatcaaa caagctaaga acagttttgg ttcttaggct tggttccttt gtcccatggg
                                                                     2580
gatgatgaag aaaataaatc agaatgcttg actgtttcct gagcagatct agtcaaaagt
                                                                     2640
cetteettt etgacteage cacateagtt etcecaaatt ttaatgacte ettggeacte
                                                                     2700
tcaaccttct tatccacaga cttcactcca agttgtgcct ccttctcttc ttcatcgctg
                                                                     2760
aacagcaaag gtggtgcctc agagacagtc tcttttttct ttgttgcagg aggaacagat
                                                                     2820
gtgggaggag agccaaacag agagcctccg ctatcaacat cgtcttcaaa gaggagtqac
                                                                     2880
actictizgg tottottttg gotgtoottg goaatggcaa aaagatoato ttottogtot
                                                                     2940
tecteaaaga gaetggtett ttteacagee ttggeeteet ggetetggag ggteecagaa
                                                                     3000
tecetgggtt eteetttaga eetgetgtea gatgetaagt gggtetgtga ageaggaata
                                                                     3060
ttccactggt cctcctcatc actgctgaac aacagggcag atgctttctt tttggagagc
                                                                     3120
teggaggett ttgetttete ttetetetga gettgtagae acaatgtetg ettettagea
                                                                     3180
getgtacece caaaaagatt atcetettea tetteateat caaacaggga aaccgacgtg
                                                                     3240
gggagettge caggeageag agatgeaeet tttaagttae tegecetttg agaagaaaae
                                                                     3300
aaatcctcag agtcctcctc atctgaaaat aagccttttt gagtctttgt ttctgatgag
                                                                     3360
ggcttgagat ttttgctgga agataaggta accttttttt ctgctcttgc tttattttca
                                                                     3420
tetgtetgae teacagtgge ttetggegat getacggett tttetttgaa cagateteet
                                                                     3480
tettegteac caaagatate ggeagtggat tggaetttge gtgttttaga aggtttgetg
                                                                     3540
tggggtgccg agaaaaagtc gtcatcatca tcaccatcat catcatcaaa gaggccagtg
                                                                     3600
ggagggggac cataggggct tttccttgga gtgggctgct caggcttctg tggctccttc
                                                                     3660
agtgatggaa cggaggcagc accaaacaca tccgtgtctc ctaaaaatac agaaacagct
                                                                     3720
ectgetggga ttttetttee aggtttggat gatgaagaet eeteettaae agaggeteea
                                                                     3780
gettgeegat cetgggggge tteegtgaag aggteactet cetegteete ateateaaag
                                                                     3840
agccccttgc ccccactgaa caggccacct ccagagccaa atggcgagaa gtcctcgtcg
                                                                     3900
gtcagcttgg ggggtgcgaa taagttatcc tcttcatcgt ctgaaggagt tctcctttcc
                                                                     3960
ttettetett tgagtgtett eegaggtitt getteteetg agggtaaggt tgteggetee
                                                                     4020
tegtecacte gacceatgge atececettg atgegggeag ceageteate tgeaaacgat
                                                                     4080
gtaggtetge ttettttagg tetagtattt tetteaatgt ceteaatate tteeteetee
                                                                     4140
ttctcagagt cagcaaaaag gtcacagcca tcatcatcct cttcctcatc actcatttgt
                                                                     4200
gtggtgtgct ggttttgttc attgtcactg tgatgggcaa aatcttcatc tgactcctcc
                                                                     4260
tettettet etteeteagt gteeacaata etgeeacgat eactgeetae agageettet
                                                                     4320
teactggaca getetecaag acctacatet tettgtteca tgaacagett tgacccaatg
                                                                     4380
agatatggta aaggacgatc aatgtataga teetttggtt caaggatcag ttecaccege
                                                                     4440
ccattagcat catcttcctc ggagtctgag tttcctgctt tgatatcaag ttgctcaaag
                                                                     4500
gcactgtcca atacttgtaa gccatagttc acagcctcct ggactttagg aatgagatct
                                                                     4560
acticittet getetegtgt etteteetge tetgtttttt etgeeteage ettgagtaet
                                                                     4620
ggctcctcca cttcttcatc atatacacga ttctcaatga actgggtatt agagagcata
                                                                     4680
aggaagtcat tgaagacatt atgcaggcga caatctgtgg ctttggtttc ccgaattagt
                                                                     4740
ccgtccactt gtttcttgat ttcatgggtc ctagagatag tttgctgtga gaattcctgt
                                                                     4800
agaaactgta gtaggcccgc gtcggccgcc agcgaccagc tctggctgct cctgcggatc
                                                                     4860
tectecateg accaeggeeg eteceacaeg ggeteegaeg etggegeeag etectggteg
                                                                     4920
ggggtcgtcc ggttcatcat cctagccgcc cggctcggtg ggctccgaag ctgccagcac
                                                                     4980
acgccgagga ctgcagagcc ccggaagcct agccccagcc aagctgcccg gggcgtgac
                                                                     5039
```

<210> 3250

<211> 805

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (1) ... (806)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (615) ... (145)
<223> similar to gi555225 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3250
aacatgcctt aactttgtat gttttataac tttccttact aaaggtacat ttttataact
                                                                       60
ttettaatat tteettteee ttetteetae tteatttett teettagtet ttetttttge
                                                                      120
atctttttct gatttctgtc tcttctagtc tctctcttat ttttttctat ttctctttct
                                                                      180
aatgtacaat aattagatga gtgttggtaa caatggatat atgtacatat cttagtttcc
                                                                      240
aaaatttagg gatgtgttta acatctgttt gccacaactg attaggttcc aatcctctag
                                                                      300
ggttaacacc tgtttaagga ggaaacgtgc ctgtcagctg gtaatctggg cattgtagga
                                                                      360
taattigtit agccagicte tgggctagtt gaaattgttt agataagttt etccaatttt
                                                                      420
ggtggaaaaa ttgatgtgat tgggtggctt ggtcaagcag tgatgtcata acctgaaggt
                                                                      480
ctgcttgatc ttgccacaag ccaatgggcc aggcagagat ctgtgggctc aaacgtgtgt
                                                                      540
aataaaaata ggatgtgtac cttggtccgg caattgctga agttgaagaa aaagaggcac
                                                                      600
acagagtggg ctccagagcg aacttaaggc tgtaaaagta atttaataaa taaacagaac
                                                                      660
agcctcagct ctccgaatgc tagtaaattt agatccagtg attggattac gtggtctcca
                                                                      720
ccagactgcc gcttttccat ctttaccgaa ttccaccaca cggtctaaaa gacatcaatn
                                                                      780
gnnnntnctn ataqtcttca attcc
                                                                      805
```

```
<210> 3251
<211> 1240
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1098)...(187)
<223> similar to gi3876090 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ttttttttt ttctaaagct ttatttattt tataaaatgc atagaataaa ttatactagt
                                                                       60
aacattttaa aaattaacat ctttgtattc agcagtcctg ggtcaggagg caggaggagg
                                                                      120
gtggtgggga cgggatggct cacttgggca gctaacccgt gtaggccact tcctcctcgt
                                                                      180
cactgecate ggggacegeg tetgteceaa agtageggte gecaaagtte ceaatgeetg
                                                                      240
ggatgatgcg gaaaaaggtc attgacccgc ttgtccaccg ccgtggtgat gattctcact
                                                                      300
cgctggaaat gcataggcca cctgagtgca cgcccatctc tgccatgagc agcgacagca
                                                                      360
aaaagatett gteeteagge acgtegtggt eeaggageae gegeaetgee ateatggeeg
                                                                      420
ccgcgcccgt ggacacggtg cagtccatga ggatcacgtg gtcatcgctg atgtccttgg
                                                                      480
gcagcetcag gtagtggage tgegggeage aggggteagg etgeaggtgg ggeteeetge
                                                                      540
```

```
gtccccttgc tgtgagctcc ctctgccccc tacccccggg ctcatcaccc cggctgcccc
                                                                      600
caggcacete gggeteeeeg gtaagetggt tggtetggat gaggatggtg cegatgegea
                                                                      660
cgtctttgca cacagcgcgc agcgcgggct ccatggtttc accggcgcgc agaatggaca
                                                                      720
caccggtgat ctgcggggag gggaggctaa gcgcccacat cccgccccag cagcctgtcc
                                                                      780
cgcgcccagg tgtgcccagg caggtacctg cttccccgca tagcacttgc ccgcatagtc
                                                                      840
ctgcccctgc ggggtctgta cgacgcagtc ctgaaagggc aggaaggaga gcgcgtgctc
                                                                      900
gatgagcage egeateagte tettggagta gaagatgaae tegtegegae tggteteett
                                                                      960
gtecetgtgg ggecaacagt tgagegggag caegegeeeg gggeegeeee gteeecaggt
                                                                     1020
gggccctcac ctgatgatgg tgtgcatgcc ccgtacctgc ggcgtgctct tcaggacgct
                                                                     1080
cagcgtccgg ggcagcgggt ggcactggtg tgccgaggcc agcgcagccc tggggacaaa
                                                                     1140
ccgatgggga acactcaaga agggggtett ttcccagage cetecetece cacaggaegg
                                                                     1200
ctgtgcgtca ctgtgagggg aaccctcggc caagctggcg
                                                                     1240
```

```
<210> 3252
<211> 2047
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1541)
<223> similar to gi5689465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3252 caagaagatg aagaacaaac cagcacccaa cctcataggg caccaagcaa ggaagaagat . 60 gatacagtta actggtattc cagtagtgaa gaggaagaag gaagcagtgt caaatcaata 120 ctgaaaacat tacagaaaca aacagaaact ttaaggaatc agcaacaacc ttccacagaa 180 ctcagcactc ctactgatcc aagacttgct aaagagaaaa gtaaaggaaa ccaagtggtt 240 gaccctaggc ttaggactat cccaaggcaa gacattagaa agccttctga gtctgccca 300 ctggatctta gacttgcgtg ggatcccagg aaattgagag ggaatggaag tggtcacata 360 ggctcttctg ttggtggagc aaagtttgat ttgcatcatg caaatgctgg cactaatgtc 420 aaacacaaaa gaggcgatga tgatgatgaa gatacagaaa gagaactgag agaaaaagct 480 ttcttaatac ctttggatge ctcacctgge ataatgetee aggatecaag gtcacaattg 540 agacagttca gtcacattaa aatggacatt actctaacca aacccaactt tgcaaaacac 600 atcgtgtggg ctcccgaaga cttacttcca gtacctttac ctaaacctga tccagtgtct 660 teaateaatt tacetetgee eccaettata getgaceaga ggetaaatag attatggaat 720 acaaaaagtg atcttcatca aaacacagtg tccattgatc caaaattagc agccaaagcc 780 aaaattaaca caacaaacag agaaggctac ctagaacaat ttggagactc acacggttca 840 ggagctaaat taggagatcc tagactacaa aaaaattttg atcctaggct tcacagactg 900 cccaatacag agtotcatca agtggttatg aaggattcac atgcatcaaa gggtgcccct 960 cacttaccca gatcaaaccc tggttcatca cagccctcag gggcaggaac tagcaattct 1020 ggttccgggg ctctgcctcc atatgcccct aaactctctt cctcagctgg ccttccactg 1080 ggaacttcca cttcagttct tagtggtatt agtttgtatg accctaggga tcacggttca 1140 tcatccacat cagagetage aacagettet tcaggagaaa actcaaagaa ccagaaaaaa 1200 agtggtggct taaaaagtag tgacaaaact gaaccttctc ctggagaagc catccttcca 1260 caaaaaccca gtccaaacgt gggagtcact cttgaggggc cagctgaccc acaggcggac 1320 gttcccagga gttctggtaa ggttcaggtc ccagcagtgc acagccttcc tgttcaggca 1380 ttaacagget taattaggee acagtacagt gatecaagge aggeaaggea gecaggacag 1440 gggagcccga ccccagataa tgatcccggt agagaaacag atgacaaatc tctgaaagag 1500

```
gtttttaaaa cttttgatcc aactgcttca ccattttgtt agctattgtg taactgagca
                                                                     1560
attetttea etettgtgae tateteagte etetgetgtt ttgtaactgg tttaceteta
                                                                     1620
tagtttattt atttttaaat tataaacact tttcagctgc tagtatcaga accacatgaa
                                                                     1680
gttatagcct ctaaagcctg cggtatttta tataatattt ttataacttt aagagactgt
                                                                     1740
agtaattgac ctaaaaactt atgttagctt cagtaaaagt acttttattg taaataaaca
                                                                     1800
atcatgaact caacactctg cctgaatata tgccagttgt ctttcataat caatgtttag
                                                                     1860
ataaatgatt gccacttttt atatggttgt ttagtttcaa gcaatatgat gtacattact
                                                                     1920
tttgagaaac agtattttga ctaggacctc tcttatttgt cagcacagaa ctgattaata
                                                                     1980
tgtaatgcta cctgctaatt aaaatgtaaa atcaagtaaa gaaaacattt taaaattaaa
                                                                     2040
aaaaaaa
                                                                     2047
```

```
<210> 3253
<211> 1707
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (670)...(417)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3253
cggacgcgtg gggaagaggt cccatttctg agccacagaa acaggccaca tccagtaggg
                                                                       60
gtcctggaag gctgtgagaa cccagaggag accctgaccc agcctgcagg tagaagactg
                                                                      120
cetttggagg cagetttgaa agatgactet tecagatgga agaatcagga agggeettee
                                                                      180
cacgtggagg caccagcagg agcaaacgtc cctggtgtgt tcaggcaaag agccacagga
                                                                      240
gagtgacctc gtggagtggg aagagattgt ttcccattcc cttgccaggg attggttgag
                                                                      300
gaatggacaa ggettgeagt teaegeaage eagtgaaatg egaggggaag tettgggagt
                                                                      360
ggggtggagg aggtcatctg ggaagggtgt ccttggtctt aaaaagaggc acaagaggcc
                                                                      420
gggcgcggtg gctcttgcct attatcctag cactttggga ggccaaggca gggggatcac
                                                                      480
ttgaggtcag gagttcgaga ccagcctggc caacatggtg aaaccccgtc tctactaaaa
                                                                     · 540
atacaaaaaa ttagccagac gtggtgccaa gcacctgtaa tcccagctac tcaggaggct
                                                                      600
gaggcaggag aatcacttga acccaggagg cagaagttgc agtgagccaa gatcgcgcca
                                                                      660
ctgcactcca gcctgtgtga caagggcgaa actccatctc aaaaaaaaag ggggagggtg
                                                                      720
gcgcaaggag aggacacete teteetggee etgtegeeat etteeeteat caatagetaa
                                                                      780
aaatggcaaa gaagaaagag ccaggacccc gtgccatcaa atcctccggc cttgtgctgc
                                                                      840
cctgtctcgg cactgcttgc cttaggagat caggagtgtt cctagccact gggagatggg
                                                                      900
atgeetgeea etggeagete tgeegteeat ceteaceate ceaeegteee eecaagaeag
                                                                      960
ctctccatcc catcctctgc ctcccttcta gcctcaacct aactcagggc tcccccgtct
                                                                     1020
cacacctggg ttgcaggaac atcetettca ccaaceceee teccatecet ceteaggget
                                                                     1080
gectagggea getacaaaaa ecaggecage etetgaaagg tgetecacat eteattaaaa
                                                                     1140
accgtgaaat cgcactgccc cactatcaga atagctcaga ggagaaggtc tgccagtacc
                                                                     1200
aagtgetggt ggggatacgg agaagagcag eteccaggeg etgetggtge aaatgtgett
                                                                     1260
tgttgcaccc acggcaggaa actgaccagc ttctcatcaa gttaaatacg catctaccct
                                                                     1320
atggeetage atttecaete ttgettaeae atccaggaga aatgagteet tacatgeaea
                                                                     1380
aaaggatgag taccgtaata ctcacatcag caaataaaca atacagctgt gtgtcagtag
                                                                     1440
tagaatgaat aaattgtggt cgattcatac gttagaatac agcaatttaa aaacaactgc
                                                                     1500
tacacacaaa aatgttggtg aatctttcag acacaatgtt gagcaaaaat agccacagaa
                                                                     1560
gagtgtaagg ctgtacgatt ttatttaggt gaggttcaag aacagacaaa acacggtgat
                                                                     1620
```

```
<210> 3254
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1370)...(9)
<223> similar to gill96429 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3254 · ggaatttatt ggctaatgct accgtaaaag gtggtcggac acaattttga ttcctaaagg 60 tectgttaga aagaaaagag agaacatatt tatatttaee teeeteeeet ttataettat 120 tatatttacc ctcccaaatt gtgattgaac tttgagccat agctaatttc cataatcctg 180 aatgttcctg tcctatggca ggagatatca tttttggaat aggggtgata atgccaccag 240 ggetecatat aataggaaca teagetteeg tetgaatgta eegtgtatgg ttetettee 300 aatgagtcca/tcagcttatt ttataagaag gcccttcagt gcaatttttc ttaaaaatcc 360 ccttagggga ccagtcaatg acgattccat aggaattatt ttgtagcacc ccagccttac 420 ttgctacaca atttccccaa tgccaagcgt ccacaccttc aaaccaaact ctattttgtt 480 tacattcgag tttgtctggt cagaactgct gagtttcagg gctggaatgg ttatatttta 540 aactttgccc tgaaatcata tataaagtag cctgtgattt atttttcca gggattactg 600 ccaaccatac ttgtgtgcca atttgtaagc atccagcagc aggtcctagg catattggag 660 gatatttata teetattgat atatteattt teateeette eteattagga tgeateggea 720 ctctgttatc tatgggctca ggcatcgagg ttctgtcatt gttgtacacc tcaataatag 780 ggtccatcca actcacagac ctaattaaag gaggaaatgg gacataagtc caataagtaa 840 aattttgagt tgcttttaca gtagggaggc ttaccgccac agtaagtacc accatcatag 900 ccaccattag gttactagtt gtttttgatt tgttctgtgc tctcagattg tcctctgcca 960 tetgtgecag ttteetgatt tgteeceatg ttggagggte tgeetggtga gtattettgg 1020 tetttteett tgtetetgag atttteatte atgecateae tegtataggg agttetgget 1080 cttcccagag tcctctctc ctggtgtggc tcatgataga ccttcagatg tttggtgggc 1140 acccacagag gcacctgatt gtcacttgga gagacagaag caaatcctct tccccatgta 1200 attattitte etitticeca actettigta tgtgcatece tecactgtat afettgtetg 1260 geattittat titeetittg teetgitaag tgitgiteag etgetgieat gggetgatee 1320 ttttgtaaaa ttaccccctt taatgttgat aaagcgaggt gtagttgtgc tggaaaaaaa 1380

```
<210> 3255
<211> 1145
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (685)...(885) <223> similar to gi4191265 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3255
acattgcggt ggacttctct tccttcgatg ccatcactgt aggtaagaag gtcccactgg
tgctttgctt ctttctctcc ttccatatct cttagtgtct ccagagctgc agtacaagtt
                                                                       120
ggggggatgg actgtaaaag ccagaaatcc caagccacaa gcacgctgca ggtagcaacc
                                                                       180
ccacacccag caaaacaccg cttcttcctg cccactttcc cctctgcgcc aactgtacac
                                                                       240
accataccet atgettigtee atttigggaaa etggetteea ggacageate ttteetggaa
                                                                       300
agacagcagg aagctgatgg tcactcctca actctctctt gtctctgggc agacaggcaa
                                                                       360
cagcaactgt acatttttaa agggagccat ttctgggagg tggcagctga tggcaacgtc\mathcal{J}^{(s)}
                                                                       420
tcagagcccc gtccactgca ggaaagatgg gtcgggctgc cccccaacat tgaggctgcg
                                                                       480
gcagtgtcat tgaatgatgg agatttctac ttcttcaaag ggggtcgatg ctggaggttc
                                                                       540
cggggcccca agccagtgtg gggtctccca cagctgtgcc gggcaggggg cctgcccgc
                                                                       600
catectgaeg eegeeetett etteeeteet etgegeegee teateetett eaagggtgee
                                                                       660
cgctactacg tgctggcccg agggggactg caagtggagc cctactaccc ccgaagtctg
                                                                       720
caggactggg gaggcatccc tgaggaggtc agcggcgccc tgccgaggcc cgatggctcc
                                                                       780
atcatettet teegagatga eegetaetgg egeetegaee aggeeaaaet geaggeaaee
                                                                       840
acctegggee getgggeeac egagetgeee tggatggget- getggeatge caactegggg
                                                                       900
agegeeetgt tetgaaggea eeteeteace teagaaactg gtggtgetet eagggeaaaa
                                                                       960
tcatgttccc caccccggg gcagaacccc tcttagaagc ctctgagtcc ctctgcagaa
                                                                      1020
gaccgggcag caaagcctcc atctggaagt ctgtctgcca aagttccttg aagaatgcag
                                                                      1080 .
cattgtcttt gtctgttccc accacatgga ggtgggggtg ggatcaatct taggaaaaag
                                                                      1140
caaag
                                                                      1145
```

```
<210> 3256
<211> 2096
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (30)...(1048)
<223> similar to gi487783 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3256
tagtccagcg tggtggaatt ccagaggtga aacctcacgt gtgtgaggag tgtgggcatg
                                                                       60 :
gatttatcca gaagtcgtcg ctcaaatcac atcggagaac acactcaggg gagaagcctt
                                                                      120
atgtgtgtgg ggaatgtggg cggggattta gccggaggat agtcctcaat ggacactgga
                                                                      180
ggacacacac gggagagaag ccttacacgt gctttgagtg tgggcgaaac tttagcctca
                                                                      240
agtccgctct tagtgtacat cagaggatac actctgggga gaagccttat gcatgcacgg
                                                                      300
agtgtgggca aggctttatc acgaaatcac agctcatcag acaccagagg acacacacag
                                                                      360
gagaaaagcc ttatgtctgc ggagagtgtg ggcgaggctt tatagctcag tcaaccctcc
                                                                      420
actaccaccg gagtacacac tccaaggaaa aaccttatgt gtgcagccag tgtgggcgag
                                                                      480
gettttgtga taaateaact eteetegeae aegageagae acatteaggg gagaageett
                                                                      540
```

```
atgtgtgtgg ggaatgtggg cggggatttg gccggaagat actcctcaac agacactgga
                                                                      600
ggacacacac aggagagaaa ccttacgcat gcatcgagtg tgggcgaaac tttagccaca
                                                                      660
agtocactot cagottacat cagaggatac actoggggga gaagcottat goatgogtgg
                                                                      720
agtgtgggca aagctttagg agaaagtcac agctcatcat acaccagaag atacactcgg
                                                                      780
ggaaaagctt tagaggtgca aggagtgagg atgtgatttt agcaacaagt cagccatcag
                                                                      840
ccaccaccage ggaaatgett agggagaage ettgtttgta aggtaatgtg gacagagetg
                                                                      900
tacgtggaca tcattacttg tcacgtgtca gaggacacac tcgggagaaa ccttcatgga
                                                                      960
gtgagagtaa ggtgttggct ggaagtggcc ccttaagaga tacttggagt caaatctatc
                                                                     1020
cactgtacgc ccaccccact cttgttctaa gagctttggg gacagtcttt tgacccctta
                                                                     1080
catteettta gatgtgaaga tgacagagat etaaettetg agagcagagg tgtcaagtga
                                                                     1140
eggteeeett ggaggaatgg tetttgeate tgaetaette ettetgeaae tgtgttette
                                                                     1200
cattagette catgacacte teetgettta tttttteta catetetage etttgetgtt
                                                                     1260
tectetecta ecceaecttt agattttaet eagagtteag tetecageee tacaatetga
                                                                     1320
gggacacett taccaggtee cetteetaac cetecagtee caaatecaag attetttaac
                                                                     1380
cacactetaa aagttettea gaeteaggae ttaaacatag ceaegeeace ttggeettea
                                                                     1440
atgacaggga tetageaatg etgeateate ageetteeaa taccaggttt aagggtattt
                                                                     1500
taaacacage teetettaaa teeteeaate teagtaceea gtgttttage catgeteggg
                                                                     1560
tggctaaatt acatccagga atggtgccag ggcctttagc catttgtctc tcctcacact
                                                                     1620
ccagggccca tatggcccag gttctgacag tttgccttac tcccttggcc tggggctagc
                                                                     1680
cctacctgat accetgtgte aatgagtgta cettggagag ctatecacte aggeeceagt
                                                                     1740
gcctctattt gctaagggac tctgccacag aaaagaaggg gagagatgtt catgtaacct
                                                                     1800
caaaatactt aggcttggtt ttgatgctag agaggaaaaa ggacttggag agagagaagg
                                                                     1860
aatggctggt ccagaggctt ttgtccactc cctctcactg gaagtggttg atctccaggg
                                                                     1920
aatccccaag gttagcctgc ttaggggaag ggctaggggt acctggaatg taggatctcc
                                                                     1980
cccatgcctg gcctaccacc ctaatgtgtc cggaattggt gggttcttgg tcttgctgac
                                                                     2040
ttcaagaatg aagccgtgga ccctcacggt gagtgttaca attcttaaaa aaaaaa
                                                                     2096
```

```
<210> 3257
<211> 1142
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1142)
<223> similar to gi5441615 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3257
attcacatct tattcagcat caaagaattc acacatgaga gtaagcacat gaatgtaatg
                                                                       60
aatgtggaaa agctttcagt caaacctcat gccttattca gcatcacaaa atgcatagga
                                                                      120
aagagaaatc gtatgaatgt aatgagtatg agggcagttt cagtcatagc tcagatctta
                                                                      180
tectgeaaca agaagteete accagacaga aageetttga ttgtgatgta tgggaaaaga
                                                                      240
actocagica gagagoacat ciagitoaac atcagagoat toataccaaa gagaactoat
                                                                      300
gaatgtaatg aagatgggaa gatatttatc aaattcaggc ttcattcagc atctgagagt
                                                                      360
tcacaccagg gagaaatcat gtatgtactg catgtggtaa agccttcagt catagctcag
                                                                      420
ccattgctca gcatcagata attcacacca gagagaaacc ctctgaatgt gacgaatgaa
                                                                      480
gaaaaggtat tagtgttaaa ctcttaatcg actcctgcaa atctatacca gtgagaaatc
                                                                      540
ttacaaatgt attgaatgtg gcaaattttt catgctatta gtattttcat accttagtca
                                                                      600
catttggaga attcacatgg gaataaaatt ccattgctgc aatgaatgtg aaaaagccat
                                                                      660
```

```
cagtcaaaga aactacettg titagtatea aattcaegee atgcaaaaag attataaatg
                                                                      720
taataagcat gtatgtgtgt gaggagattc agtcataacc caacgctcat tcaacatcaa
                                                                      780
agaatttata cctaagagaa cttatttggg tgtagtaaat ggcagatctt tcaataggag
                                                                      840
tttaactagt ctttgtcata tcagaatatc catagtagac aagaatttga tgtaacgcaa
                                                                      900
atggaaaaac tegacaccac atticagget ttacecaaca tegaaataat ggagagaaaa
                                                                      960
ttgttgatta tttgtttatg aaattgttaa tacatagtcc caatcttttt cattgcacaa
                                                                     1020
aaatctaggg ttgacttggt aaatgcagtg acattttctc atggagttcc tttatttaat
                                                                     1080
atgtatteta agtaggtacg tttatttttta etttttatt ataattttga tattaaaaag
                                                                     1140
                                                                     1142
```

```
<210> 3258
<211> 1199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(545)
<223> similar to gill84790 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3258
ttcagtgtgg cggaattccc atcgtggagt tccacatgac gactgaggcc caagccacca
                                                                       60
tecgeatgga caccagtgea agtggeecea ecegeetggt ceteagtgae tgtgeeacea
                                                                      120
gccatgggag cctgcgcatc caactgctgc ataagctctc cttcctggtg aacgccttag
                                                                      180
ctaagcaggt catgaacctc ctagtgccat ccctgcccaa tctagtgaaa aaccagctgt
                                                                      240
gtcccgtgat cgaggcttcc ttcaatggca tgtatgcaga cctcctgcag ctggtgaagg
                                                                      300
tgcccatttc cctcagcatt gaccgtctgg agtttgacct tctgtatcct gccatcaagg
                                                                      360
gtgacaccat tcagctctac ctgggggcca agttgttgga ctcacaggga aaggtgacca
                                                                      420
agtggttcaa taactctgca gcttccctga caatgcccac cctggacaac atcccgttca
                                                                      480
geeteategt gagteaggae gtggtgaaag etgeagtgge tgetgtgete tetecaqaag
                                                                      540
aattcatggt cetgttggac tetgtgette etgagagtge ceateggetg aagtcaagea
                                                                      600
tegggetgat caatgaaaag getgeagata agetgggate tacceagate gtgaagatee
                                                                      660
taactcagga cactcccgag tttttttata gaccaaggcc atgccaaggt ggcccaactg
                                                                      720
ategtgetgg aagtgtttee etecagtgaa geeeteegee etttgtteae eetgggeate
                                                                      780
gaagccagct cggaagctca gttttacacc aaaggtgacc aacttatact caacttgaat
                                                                      840
aacatcaget etgateggat ecagetgatg aactetggga ttggetggtt ecaacetgat
                                                                      900
gttctgaaaa acatcatcac tgagatcatc cactccatcc tgctgccgaa ccagaatggc
                                                                      960
aaattaagat ctggggtccc agtgtcattg gtgaaggcct tgggattcga ggcagctgag
                                                                     1020
tectcactga ccaaggatge cettgtgett actccageet cettgtggaa acceacetet
                                                                     1080
cetgtetece agtgaagaet tggatggeag ceateaggga aggetgggte ceagetggga
                                                                     1140
gtatgggtgt gagctctata gaccatccct ctctgcaatc aataaacact tgcctgaaa
                                                                     1199
```

```
<210> 3259
<211> 3596
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (3381)...(2440)
```

<223> similar to gi535518 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3259 gttccagctt gtagaggcta ctagatttcc tcaacttgtg ggtgcatgat ccaatctctg 60 cctctgtgat caccttgcct cctcctcttc tcctcttctg tatgggtctc ctcctctgga 120 ggaagagtgt caggeetetg ageecaaget aageeategt ateceetgtg acetgeaegt 180 acacatecag atggecagtt cetgeettaa etgatgacat tatettgtga aatgeettet 240 cctggctcat cctggctcag aagctcccct actgagcacc ttgtgacccc cactcctgcc 300 tgccagagaa ececectttt teetttacet acecaactee tataaaaegg ececaceeet 360 atgtecette getgaetete tttteggaet cageeegeet geaeceaggt gaaataaaca . 420 getttattge teacacaaag cetgtttggt ggtetettea caeggaegea egtgaaattt 480 ggtgccgcgc atgaaatttg gtgccgtgac tcggatcggg ggacctccct tgggagatca 540 atcccctgtc ctcctgctct ttgctccgtg agaaacatcc acctacgacc tcaggtcctc 600 agaccigacca godcaagaaa catotoacca atttcaaato oggagottgo tacatgtgoo 660 ggaaatctgg ccactgggcc aaggaatgcc cgcagcccgg gattcctcct aagccgcgtc 720 ccatctgtgt gggaccccac tgaaaatcgg actgttcaac tcacctggca gccactccca 780 gageceetgg aactetggee caaggetete tgactgaete etteccagat ettetegget 840 tageggetga agaetgaeae tgeeegateg eeteggaage eeectagaee ateaeggaeg 900 ccgagcttcg ggtaactctc acagtggaag gtaagcccgt ccccttctta atcaatacag 960 aggetactea etecacatta cettettte aagggeetet tteeettgee tecataactg 1020 ttgtgggtat tgacggtcag gcttctaaac ctcttaaaac tccccaactc tggtgccaac 1080 ttagacaata ctcttttaag cactcctttt tagttatccc cacctgccca gttcccttat 1140 taggetgaga caetttaaet aaattatetg etteeetgae tatteetgga etacagetat 1200 atctcattgc cgcccttctt cccaatccaa agcctccttt gcgtcctcct cttgtattcc 1260 cccaccttaa cccacaagta taagatacct ctactccctc cttggtgacc gatcatgcac 1320 cccttaccat ctcattaaaa cctaatcacc cttaccccac tcaacgccaa tatcccatcc 1380 cacagcatgo tttaaaaaaga ttaaagcotg ttatcactcg cotgotacag catggcottt 1440 taaageetat aaacteteet taaaatteee eeattttace tgteetaaaa eeagacaage 1500 cttacaagtt agttcaggat ctgcgcctta tcaaccaaat tgttttgcct atacacccca 1560 tggtgccaaa cccatatact ctcctatcct caatacctcc ctccacaacc cattattctg 1620 ttctggatct caaacatgct ttctttacta ttcctttcca cccttcatcc cagcctctct 1680 tegettteae tiggaetgae cetgaeacce ateaagetea geaaattaee tiggetigtae 1740 tgctgcaaag cttcacagac agcccccatt acttcagtca agcccaaatt tcatcctcat 1800 ctgttaccta teteggeata atteteataa aaacacaegt geteteeetg ccaategtgt 1860 ctgactgate teteaaacee cageacette tacaaaacaa caacteettt cetteetagg 1920 catggttagc gtggtcagaa ttcttacaca agagccagga ccacaccctg tagcctttct 1980 gtocaaacaa ottgacotta otgittitago otagoootca igiotgoatg cagoggotgo 2040 cactgettta atacttttag aggeeeteaa aateacaaae tatgeteaae teaeteteta 2100 cagtteteat aaetteeaaa atetattte tteeteatae etgaegeata taetttetge 2160 ttcccagete ettcagetgt acteactett tgttgagtet eccacaatta eegttgttee 2220 tggcccagac ttcaatccgg cctcccacat tattcctgat accacacctg acccccatga 2280 etgtatetet etgatecace tgacatteae eccatttece catatteet tettteetgt 2340 tecteacect gateacgett gatttattga tggeggttee accaggeeta ategecacae 2400 accagcaaag gcaggctatg ctatagtaca agccactagc ccgcctctta gaacctctca 2460 tttcctttcc atcgtggaaa tctatcctca aggaaataac ttctcagtgt tccatctgct 2520 attetactae teeteaagga ttatteagge ceetteeett ceecacacat caagetecag 2580 gatttgcccc cacccaggga ctggcaaatt agctttacct caacaatgcc ctgaggtcag 2640 gaaactaaaa tacctcttag tctaaataga cactttcact ggataggtag aggcctttcc

2700

```
tgcagggtct gagaaggcca ccgcagtcat ttcttccatt ctgtcagaca taattcctca
                                                                     2760
gtttagcctt cccacctcaa tacagtctga taacagacga gcctttatta gtcaaatcag
                                                                     2820
ccaagcagtt tttcaggctc ttagtattct gtgaaacctt tatatccctt aaggtcctcc
                                                                     2880
atcttcaaga aaagtagaat ggactaaagg tcttttaaaa acacacctca ccaagctcag
                                                                     2940
ccaccaactt aaaaaggact ggacaatact tttaccactt tcccttctca gaattcaggc
                                                                     3000
ctgtcctcag aatgctacag ggtacagccc atttaagctc ctgtatagat gctccttttt
                                                                     3060
attaggcccc agtctcattc cagacaccag agaacaaacc ccctttgact gtaattttcc
                                                                     3120
attacettee etaateetat aaaaeggeee caceceatet eeetttgetg actetettt
                                                                     3180
eggacteage eegeetgeac eeaggtgaaa taaacageet tgttgetaca caaageetgt
                                                                     3240
ttggtggtet etteaeatgg aegegeatga aatgtggege atgaaatttg gtgeegtgae
                                                                     3300
totgatoggg ggacotocot tgggagatoa atococogto otootgotot ttgotoogtg
                                                                     3360
agaaagatee acetatgace teaggteete agaetgacea geecaagaaa cateteacea
                                                                     3420
atttcaaatc cggaccccac tggaaatcgg actgttcaac tcacctggca gccactccca
                                                                     3480
gageceetgg aactettgee caaggetete tgaetgaete ettettgget taaeggetga
                                                                     3540
agactgacgc tgcccgattg cctcggaagc cccgtagacc atcacagatg ccgagc
                                                                     3596
```

```
<210> 3260
<211> 2331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2164)...(864)
<223> similar to gi4884550 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3260
ttttttttt ttctaggtcc aatggtagtt tttattcccc aggaacaaag ataatgtgga
                                                                       60
gaagaaactc caaaaggaaa cagagcacgg atgacagaaa tgacaccacg gcagcctggc
                                                                      120
tcaggagtca ggtagataga tggctgctcc acagtggacc tggtcatggc cctggtttct
                                                                      180
tggatccaca tttgccccgt ctcttaagtg tccatctcag aggtggagga tggagacagt
                                                                      240
gaggtggaaa acgtgcttgc tctacacaaa gacaaatgga tcttctattc ccagaggacc
                                                                      300
agggacacca aaacctccct cttcagaatg gaggtagaca gataaaaatg agaggggctt
                                                                      360
gagtgtcaca gacaatctga aagtaataat aggggctcac tgtggctggc agaactggta
                                                                      420
ctgaaatggg gactacaggg gaagcagctt ccagttttat ggtggagagt cagtcctgaa
                                                                      480
tcaggccctg gggcaattat aaccagagtg ctgtttctag ccacttactt caaaggacta
                                                                      540
tggctatgtt gaatcagaag ccattatctt tttcccagag gatgcacttc catccctatt
                                                                     600
tetggcatga teetgeteee tacgageetg atcetttaaa aaacagattg geaagegacg
                                                                      660
agaaaaacgg tgcctcacat gcttgagatg tgacagcttc tcctgcaggc aagaacctct
                                                                      720
cagaacaagg teettiggta tgagetagat catecaggee tgteeetgca gaacacacca
                                                                      780
agactcatcc ctgtactaca gggtggcctc tggctatggc ctggcacagt gaggacagag
                                                                      840
gcggggtcct gagtcaacat cacagggagg tctcctggag gatgcaggtg gagctgctcc
                                                                      900
cctgataggc tgtgccatcc agggccatgg cctccttgtc tctgctgtcc cccagcacac
                                                                      960
cattectegg etteteagga aacaggeeag tgtegaggtg gteetggeeg tageteetge
                                                                     1020
agtggagccg cttctgacag gacaacggaa ggagggacag gagctttggc aacactgggt
                                                                     1080
aaatggttgc agggttcagg gaccggcctc gcattctcca tgaatggaaa tgtgcttgtg
                                                                     1140
agtctatggg tggatccatc cacagcagcg ggccccatgt cctcccttgg cccccagaga
                                                                     1200
ceccagecee cacceacete etacatecea geagaaaage atgacageta eggacaceca
                                                                     1260
aggageteag agggeaggag cettteteee taggagteee ettagggeee tettgttaaa
                                                                     1320
```

```
ecceteeggt getteatetg cacegeaate eccacacet taccaagtga agtagactga
                                                                     1380
caaatcaggc cccaccacaa atcactgtgg tggagttgtg agcactgtac cataagtaag
                                                                     1440
acaaggaata gaaccgctgc agccctgtgg gcctgggaag agcagaggtg agaacaatta
                                                                     1500
gcaattegtt ggcagggega tteettggge accaatetet aettgeeege atggteeeag
                                                                     1560
ggtcttggga cccaataccc aacatttccc tggggcctct ggtggcccat cccttagcaa
                                                                     1620
gacccctgtg aaagccctca aaggaggact ttgagaaaac aagaagatag caagccctgc
                                                                     1680
cttacttgga gaaggtagtc aagggcatca gtgtggtcac agtggcaacg gttagattgg
                                                                     1740
tgggcaggga gaagctggac ccattagagg gagagggtgg catgctgaag cccatgctgg
                                                                     1800
tcacgatgct cccgatgcca atccagaagg ccatgacgag cccagccaac aggcccacaa
                                                                     1860
cagcaccetg cegagacaca gtgcaggect gtcacaagge cagtcetgec agecetcacg
                                                                     1920
gragterica geteterigg tgarageret geraacerer aggterater tgetaracat
                                                                     1980
gactgtggat ccagatgcat cactcacagg agggttagca catggaaaga acattccaag
                                                                     2040
gcagaagagt cccagcagcg gtcccccaac catgccaaag atgctgattg ctgcctgcag
                                                                     2100
cacaggteee atetgggagg aaatatagge catteetaga caaageagee catageeaaa
                                                                     2160
ggctggggga aaaggacagg agaggaaaca agaaggtgtg agttaacaca agcaatgggg
                                                                     2220
taaagcaagg ctccctgccc agccaaacta ccacctctgt ctctctggaa acaaaaggca
                                                                     2280
tattacatca cgccccagct tcctcccacc aagtcctcac tcctatgtga c
                                                                     2331
```

```
<210> 3261
<211> 1980
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (41)...(1414)
<223> similar to gi2811216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3261
aggggactet etteteceeg ettgtetetg geecetgeag aggettggaa ggecaaaaag
                                                                       60
aagcaggagc tgcagcatgc caacagttcc ccactgctcc ggggcagcca ctccttggag
                                                                      120
ctccgggcct gtgagttagg aaatagaggt tccaagaacc tttcccaaag cccaggagct
                                                                      180
gtgccccaag ctctggttgc ctggcgggcc ctgggaccga aactcctcag ctcctcaaat
                                                                      240
gagetggtta etegteatet ecetecagea eceetette eteatgaaac teeceeaact
                                                                      300
cagagtcaac agacccagcc tccggtggca ccacaggctc cctcctccat cctgctgcca
                                                                      360
gcagececca tececateet tageceetge agtececeta gececeagge etettecete
                                                                      420
tetggeecea geceagette cagtegeetg tecageteet caetgteate cetgggggag
                                                                      480
gatcaagaca gegtgetgae eeetgaggag gtageeetgt gettggaaet eagtgagggt
                                                                      540
gaggagacte ceaggaacag egtetetece atgecaaggg etectteace ecceaceace
                                                                      600
tatgggtaca tcagcgtccc aacagcctca gagttcacgg acatgggcag gactggagga
                                                                      660
ggggtggggc ccaagggggg agtettgetg tgcccacete ggccctgcct caccccace
                                                                      720
cccagcgagg gctccttagc caatggttgg ggctcagcct ctgaggacaa tgccgccagc
                                                                      780
gecagageca geettgteag etecteegat ggeteettee tegetgatge teaetttgee
                                                                      840
cgggccctgg cagtggctgt ggatagcttt ggtttcggtc tagagcccag ggaggcagac
                                                                      900
tgcgtcttca tagatgcctc atcacctccc tccccacggg atgagatctt cctgacccc
                                                                      960
aacctctccc tgcccctgtg ggagtggagg ccagactggt tggaagacat ggaggtcagc
                                                                     1020
cacacccage ggctgggaag ggggatgcct ccctggcccc ctgactctca gatctcttcc
                                                                     1080
cagagaagte agetecaetg tegtatgeee aaggetggtg etteteetgt agattaetee
                                                                     1140
tgaaccgtgt ccctgagact tcccagacgg gaatcagaac cacttctcct gtccacccac
                                                                     1200
```

```
aagacctggg ctgtggtgtg tgggtcttgg cctgtgtttc tctgcagctg gggtccacct
                                                                     1260
tcccaagcct ccagagagtt ctccctccac gattgtgaaa acaaatgaaa acaaaattag
                                                                     1320
agcaaagctg acctggagcc ctcagggagc aaaacatcat ctccacctga ctcctagcca
                                                                     1380
ctgctttctc ctctgtgcca tccactccca ccaccaggtt gttttggcct gaggagcagc
                                                                     1440
cctgcctgct gctcttcccc caccatttgg atcacaggaa gtggaggagc cagaggtgcc
                                                                     1500
tttgtggagg acagcagtgg ctgctgggag agggctgtgg aggaaggagc ttctcggagc
                                                                     1560
eccetetcag cettacetgg geceetecte tagagaagag etcaactete teccaacete
                                                                     1620
accatggaaa gaaaataatt atgaatgcca ctgaggcact gaggccctac ctcatgccaa
                                                                     1680
acaaagggtt caaggctggg tctagcgagg atgctgaagg aagggaggta tgagaccgta
                                                                     1740
ggtcaaaagc accatcctcg tactgttgtc actatgagct taagaaattt gataccataa
                                                                     1800
aatggtaaag acttgagttc tgtgagatca ttccccggag caccattttt aggggagcac
                                                                     1860
ctggagagat ggcaagaatt tcctgagtta ggcagggatc aggcattcat tgacactcag
                                                                     1920
ggagtgtcac acatttctgt tctgcaatta aagggagaat gaggttcatc caccaaattt
                                                                     1980
```

```
<210> 3262
<211> 1824
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1827)...(319)
<223> similar to gi854124 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3262
ttttttttt ttaaaaggta ataggtgttt attaaaaact ttttcaccca gaggcagtta
                                                                       60
acatttataa cttaaaaccc agcccactac aaaaagggat gggagcaata aaaactgtgc
                                                                      120
aacattgacc aaaggaccca aacagacgag gcccgggaag ggcagcccca ggggactggg
                                                                      180
gtototooto tooogaggoo cagagoagot goattgtgga agoogggatg coccoagooo
                                                                      240
ctggcggggc cctgtgcacc gggcctctcc ggctggggca gggacccccg aaaggccatc
                                                                      300
agtagtagtg tgtgctcatc gcgcagcctg gacgctcagc cactcactct gctccgccat
                                                                      360
tgctgaggct gcaccccacg gcggctcgat gtgaacgcca gttgccgctc ccgcggtctc
                                                                      420
cctccagtgt gctctggatt tccttcagga ctctctcatc actgagcaga gcgcgctcca
                                                                      480
teaceaggee gggetgette teetegeeat eactetgagt eeetgagtte etggetegge
                                                                      540
teggggeett ettggggeee geacegttae cagggeggtg gttettggtt tetgetgaat
                                                                      600
ccaccagaca ccggggctcc accagccact tggtggagag agagaagcgc tcaaactccg
                                                                      660
agggtgagat caggtagaag ccttggccat atttggtgaa gacgcaggag gcgatgccac
                                                                      720
tgacgtcctc ccggcggatg cagctgtagc gcacctgggg cttgagcagg ggcagcgaga
                                                                      780
ccacctggat gtcgcccagg ttggtaagga ctgccaggtg gtgctccccg tagtcctcgg
                                                                      840
ctcgacgact gccgaagtgg gccacgctga cccgccgcac tcttgagccc tccagggccg
                                                                      900
tcagcttcaa cttcagcttg gcactcacct tgggcagcgt gaacaccttg aactgctcct
                                                                      960
ctgatacgac gagcagctgg tggcttccct gcatgtcagg gctcttcgac agatcatggg
                                                                     1020
ccacttegag gggeteggga aggggtaege tgtgteegte gageaceagg atgeeeacea
                                                                     1080
ccggcgcccg gtgcatcagc tggatctcct tggcctgctc tgcccgcaca ggctcatcca
                                                                     1140
ttctccgctc ggcgggaggc acacgcaggg agaaggcata gatggtgccc ccattggtgc
                                                                     1200
cageceaeag egaggggeag tgeegggage tgteetteag gtaggtgtea geaaagtaca
                                                                     1260
gggtccggac gaagcctgtg aaggagtcct ctgccgagcg agcctcgatc ttgcgctgca
                                                                     1320
caggogocag etecatgite tggaggeetg geogeteage ettggeacte eceteetgtg
                                                                     1380
cctcaggcct cacctctcct ggggggccag ctgggtgccg cttccggctg gacacccggc
                                                                     1440
```

```
tecgaegeat ceggeggaat gaetgaegea aggaettett gagggaettg aegegggaga 1500 gtgggeette caaggeeage tggtetetgg ggtgeagtgt geaettaaca aagaeetgee 1560 geegetgetg gtggteaaag aggeeaaage catggetggt geegaaggee aegageegee 1620 aeteagagtg cagggeeaag gaggtgaeea cageeggggg etgaeaetge aecaaeaega 1680 agggetgaaa geeaggetea aagegeaegg geeetgageg ggetgeeagg egetegtgee 1740 cetteeageg gtageeetet tggteaaaaa geaggtaage etceaeetge tecaeagea 1800 geteegetge etegteate agtt
```

```
<210> 3263
<211> 1299
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (302)...(1272)
<223> similar to gi5917666 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3263
ctgtggtgga attcgtacct ctgagtgtcc tctaggatct cagctggtgc ctaacaatga
                                                                       60.
cctctttaga ctcagctcat tttcactgct acatcttcaa gccattctcc tgcctcttgg
                                                                      120
caacctctag tggcccagct tctgcctcac agcagcctct ccatgcatgc ctagctcctg
                                                                      180
cctctttagg gaacttacag gcctaaaact ttcttaattt gggcttctca ggcccagctc
                                                                      240
ctgccttctg ttggcctcta caggcctggc atcatccttt caacagcctc tttaggcccg
                                                                      300
geetetecag gaccaaaaca teettaagte aaceteacea ggeeeggete etgteteett
                                                                      360
geggeeteea gaggeegage tittgeetge caatggeete tetageecea gettitgeet
                                                                      420
gecaatggee tetetageee cagettetge ettteategg tetetecagg ettageteet
                                                                      480
ttetetteae ggeetetgea ggeetaaaae tteeteaatt tggeatetee aggeecaget
                                                                      540
cotgodtoca ggodgodtot goaggodtat otdaagodti acaacagodt otttaccocc
                                                                      600
ageteettte teegaettgt eteteeagge etagaaette eteatgttta eeteaceagg
                                                                      660
eccaceteet geettecagt agegtetaca agtttggete etgeeteeca tggatetete
                                                                      720
caggococaa actitotoaa gicaacotoa coaggocogg ottotocott toatoagoot
                                                                      780
tecaaaggee agettttget teatgtetge etteegagte ecageteetg ttttatggea
                                                                      840
geeteetgag geecagetee tgeeteetag tggeetettt tggeecaact ettteeteac
                                                                      900
cagggeette cagaccaegt teetgeettt tageageeae tacaggeeca getttgegte
                                                                      960
etttcaagag teetgeetea cagtggeete ceaagggeaa etttetgeet catgteagee
                                                                     1020
tettgtgece tggteetget teetggtaga etetgeagge eetgeteetg eettacgttg
                                                                     1080
ccccttttat aaagatccag ttcctgcctc ctggctgcct ctatgagccc aaatcctgcc
                                                                     1140
taacaacaac ctgtttttgc ccagctcctg cttcctggca gcctccttag gccaaaaatt
                                                                     1200
tectteagtt gaeeteteea ggeecateet eetgeetete ageaeeetet ttaggeecag
                                                                     1260
ctcctgcctt aataaatttg aataaattat tgttatgtg
                                                                     1299
```

```
<210> 3264
<211> 2188
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc_feature

<222> (74)...(2141)

<223> similar to gil015321 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3264
gtacagtgcg gtggaattcg ctgaccatga gccgctgggg gttcatgtct gggctctgaa
                                                                       60
cccctttagg ctggttcttc gtcggatcct gcgtcgagct gtgcgtttct tcatggagat
                                                                      120
cttaaaggca ccacctggct tcctaggcag cctggtacct gtagtggtgg agacactggg
                                                                      180
agatgettat ccagaactge aaaggaacte ageccagate gecaacetgg tgtcagagga
                                                                      240
cgaggcagcc ttcctggcct ccctggagcg gggtaggcgg atcattgatc ggactctgag
                                                                      300
gaccetgggg cetteagata tgtteeetge tgaagtggee tggteettgt cactgtgtgg
                                                                      360
agacctggga ctccccttgg acatggtaga gctgatgctg gaggagaaag gggtccagct
                                                                      420
agactccgct ggactggagc ggttggccca agaggaggcc cagcaccggg cacggcaggc
                                                                      480
tgagccagtt cagaagcagg gattgtggct tgatgtccat gcgcttgggg agctgcagcg
                                                                      540
ccaaggagtg cccccaactg acgacagccc caagtacaac tactccctgc gacccagcgg
                                                                      600
aagttatgag ttcggcacct gtgaggccca ggtgttgcaa ctgtatacag aggacgggac
                                                                      660
agcagtggcc tccgtgggga aaggccagcg ctgtggcctc ctcttggaca ggaccaactt
                                                                      720
ctacgcagaa caggggggcc aggcttcaga ccgtggctac ctggtgcggg cagggcaaga
                                                                      780
ggacgigctg ticccagtag cccgggccca ggictgigga ggittcatcc igcatgaggc
                                                                      840
agtagecect gagtgeetge ggttagggga ceaggtgeag etgeatgtgg atgaggeetg
                                                                      900
gcgtctaggc tgcatggcga agcatacggc cacccacctg ctgaactggg cactgaggca.
                                                                      960
gaccctgggc cctggcacag agcagcaggg ctcccatctc aatcctgagc agctgcgctt
                                                                     1020
ggatgtgacc acccagaccc cattgacccc agagcagctc cgggcagtgg agaacactgt
                                                                     1080
gcaggaggcc gtggggcagg atgaggctgt gtacatggag gaggtgcccc tggcgctcac
                                                                     1140
tgcccaggtc cctggcctgc gctctctgga tgaggtttac ccagaccctg tgcgggtggt
                                                                     1200
atcagtgggg gtgcccgtgg cccatgcatt ggacccagcc tcccaagccg cactgcagac
                                                                     1260
ctctgtggag ctatgctgtg ggacgtgagt cactcetttg tgctgcctgg cccaggggac
                                                                     1320
ccggatcett gecetteeet tggtetttgg agecatcage cettaatggg agatgeacge
                                                                     1380
tggcttctcc cttctctact gtcatgcccc gactttctgt tcactccttc ctcccacagg
                                                                     1440
cacctgttac gtactggggc tgtaggggac ctggttatca tcggggaccg ccagctttcc
                                                                     1500
aagggcacta cccgcctgct ggccgtcact ggggagcagg cccagcaggc ccgagagcta
                                                                     1560
ggccagagcc tggcccagga agtgaaagcg gccactgagc ggctgagtct ggggagccgg
                                                                     1620
gatgtggcgg aggcactgag gctgtccaag gacataggac gactcattga agctgtggaa
                                                                     1680
actgctgtga tgccccagtg gcagcggcgg gagctgctgg ccacagtgaa gatgctgcag
                                                                     1740
cggcgtgcca acactgccat ccgtaagctg caaatgggac aggctgcaaa aaaaactcag
                                                                     1800
gagetgetgg ageggeacte gaaggggeet etgattgtgg acaeagtete tgetgagtet
                                                                     1860
ctctcagtgc tggtgaaggt ggtacggcag ctgtgtgagc aggcccccag cacgtctgtg
                                                                     1920
ctcctactca gcccccagcc catggggaag gtgctgtgtg cctgtcaggt ggcccagggt
                                                                     1980
gccatgccca ccttcacage agaggcctgg gcactggcag tgtgcagcca catggggggc
                                                                     2040
aaggegtggg getegegagt ggtggeecaa ggeaeeggaa geaetaetga eetggaaget
                                                                     2100
geceteagta tageceaaac etatgeeete agecagetet gaeceaggte egeceaggga
                                                                     2160
cccacatgga ctaaatgtaa ttaaaagg
                                                                     2188
```

<210> 3265

<211> 975

<212> DNA

<221> misc feature <222> (934)...(356) <223> similar to gi1872200 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 3265 gtggtggaat tcaccgcacc taaaatgcac ttgcactatt actcagcagc agtaacatgg 60 taacacttaa aatggtactc ggggacctcc aaagactaaa ctgacaagcc ttcaaggagc 120 ccaggggcta gagtataatg gtgcgatctg ggctcaccgc aacctccacc acctgggttc 180 aagcaattet geeteggeeg etegagtage tgggattaca ggeatgtace accaeaceeg 240 gctaattttg tattttatt agagacgggg tttctccatg ctggtcaggc tggcctcagg 300 tgacccacct gcctcggcct cccaaagtgc tgggattaca ggcgtgagcc acacctggcc 🕝 360 taaaaatcat ttaatttttt atgettgeet agttataagg teaaagagaa teaaatgaet 420 gatgcagtca gcacctaaca acctctgtat atgggaaggg ggtaatgaga acatactatt 480 tggaaataat aacagcctaa gagccaagtg ctgaagttac atttctqcct accacagcta 540 aageteteet caetgtetee taeceagtee teettteeat caattaceag tetettgtat 600 aaatgtatcc attaccaggc tcacagactg ggagtgattt ttctcctttg gagctcgtcc 660 agaatccatc agcctcacac acatatttac ctgcaaatca ttggaaaagc aaaaatgttt 720 aactgcatgt ataagatggt tgtcatttgc ttgaataccc ccttgaaaaa tgttgattct 780 tgagcatcag tgggacatag aggtgtctga agaaccattt tacatgattt cataaatagg 840 aggictetge attaccatgi tigetigeaa agiggaaace tittagatgi giaactigaa 900 tgtatcaaga tctcaagtgc ttaatgataa ggtgttgact tgttaaatta aaccatttqq 960 aatacaaaaa aaaaa 975 <210> 3266 <211> 1334 <212> DNA <213> Homo sapiens <220> <221> misc_feature <222> (25) . . . (878) <223> similar to gi219867 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters <400> 3266 ggacgggcat teetecacae ggagtteetg gteageetgg tggeegetga etteeteetg 60 atcagcaacc tgcccctccg cgtggactac tacctcctcc atgagacctg gcgctttggg 120 getgetgeet geaaagteaa cetetteatg etgtecacea acegeaeggg eagegttgte 180 ttcctcacag ccatcgcact caaccgctac ctgaaggtgg tgcagcccca ccacgtgctg 240 ageogtgett cegtggggge agetgeeegg gtggeegggg gaetetgggt gggeateetg 300 ctecteaacg ggcacetget ectgageace tteteeggee ectectgeet eagetacagg 360 gtgggcacga agecetegge etegeteege tggcaceagg caetgtacet getggagtte 420

<213> Homo sapiens

<220>

480

ttcctgccac tggcgctcat cctctttgct attgtgagca ttgggctcac catccggaac

```
cgtggtctgg gcgggcaggc aggcccgcag agggccatgc gtgtgctggc catggtggtg
                                                                      540
gccgtctaca ccatctgctt cttgcccagc atcatctttg gcatggcttc catggtggct
                                                                      600
ttctggctgt ccgcctgccg atccctggac ctctgcacac agetcttcca tggctccctg
                                                                      660
gccttcacct acctcaacag tgtcctggac cccgtgctct actgcttctc tagccccaac
                                                                      720
ttcctccacc agageeggge cttgctggge ctcacgeggg geeggeaggg eccagtgage
                                                                      780
gacgagaget cetaceaace etceaggeag tggcgetace gggaggeete taggaaggeg
                                                                      840
gaggccatag ggaagctgaa agtgcagggc gaggtctctc tggaaaagga aggctcctcc
                                                                      900
cagggctgag ggccagctgc agggctgcag cgctgtgggg gtaagggctg ccgcgctctg
                                                                      960
gcctggaggg acaaggccag cacacggtgc ctcaaccaac tggacaaggg atggcggcag
                                                                     1020
accaggggcc aggccaaagc actggcagga ctcaggtggg tggcagggag agaaacccac
                                                                     1080
ctaggcctct cagtgtgtcc aggatggcat tcccagaatg caggggagag caggatgccg
                                                                     1140
ggtggaggag acaggcaagg tgccgttggc acaccagctc agacaggggc ctgcgcagct
                                                                     1200
gcaggggaca gacgccaatc actgtcacag cagagtcacc ttagaaattg gacagctgca
                                                                     1260
tgttctgtgc tctccagttt gtcccttcca atattaataa acttcccttt taaatatatt
                                                                     1320
tatttgcaag acca
                                                                     1334
```

```
<210> 3267
<211> 3262
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3236)...(2843)
<223> similar to gi3219569 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3267
ttttatgctt tttgttcttg attttatttt acataattgc atgtataaac tttctgatgg
                                                                       60
attgattttt cctttctgtc ccgattatct agcctctgat gtgctcaaga gctggatctg
                                                                      120
ctgacttatc aaaaaagtga catttggcca ggcacggtgg ctcagcctca cctaatggtt
                                                                      180
tettageaaa etteagtaga atgtttagaa egeggeeetg ataaaettga gtgetggtag
                                                                      240
gaggtgctac ctcgctcaat ctgtgagcaa ccagccctgt gccctggatg cttggcgggt
                                                                      300
ggagagaaag acagtgttat gtgggcaagc ctccaactca ccagttgcag tagagcatct
                                                                      360
ggctctctgt ctgctgctat agccctgtga gtcagccaga cgtgtggtcc ccaagccagc
                                                                      420
ttcccaccta gcacccttgt tctgctacag ctcccccacc tgccctcttg cattgcctag
                                                                      480
gateceaege eccgetttea gtetgetetg ggacatetgt ettettett geaggggaet
                                                                      540
aagtatatga cttaatgaat cctaaaagga aaaaaagatg tcaggaaaaa aaagtgcaca
                                                                      600
caagaaatgt tgcaacatct catccttagc aactttgttt ggttagtact gcataactca
                                                                      660
cagcagattc caaggcacct gccttgaaca ttgctacatg ctctaggcat tatcaggaac
                                                                      720
gcagccaggg tgcctgcaaa gttgtctcca gtttctgggt aagaggacca tcatccatat
                                                                      780
tgtctgtggc tttgtgtctg agttgggcta ctgagcctgt gacttcagac cccttgtctg
                                                                      840
cctgatggat acattctgta taatacgtta ccatcacaat ttcatgaatg taactaatga
                                                                      900
agatctagee etteegtgee geetgetgaa etatgteaee tgtggataat aaaaeeteta
                                                                      960
cacataggca ttttatacaa aggcaagtca aacagcaatg gtagtggcaa gtgatgtatt
                                                                     1020
tggcttaaag aagcttgtgt tactgaagtt aacgcagaag tctggcctcc gtttgtggga
                                                                     1080
ttattaaata tatateetae gggateagag teatetatta gaaacagtga tageeetggg
                                                                     1140
tataaataaa catttettta gagtttggeg teagttttte aatgteeate eteaaateag
                                                                     1200
acagtetgtt tgaggggtea gtttteaggg tgeatetgea eegagagget tgaggeagea
                                                                     1260
atgacccctg ggctgcagtt cggttgcagg cgctggtggc gggcagtcca ggttggaggg
                                                                     1320
```

```
1380
tggagatggg ccaaggtcac agatgctgca gggcttcctg tccttgctct gtgtaaccgt
catcgcggtg ggtgtttgcc cactgtccaa aggactcctg gatgtgcacg tttctctgtg
                                                                     1440
tgttggccag gcgcttctta tctcgggaga agaagctaaa cagtcgcttg atgcccgact
                                                                     1500
ccggctgggg ggacgtcctc gggtgggcga tgggtggggg ttgggggtatt cggttttcct
                                                                     1560
cttccatttc ttcactctta tagtaagcca gctcctcctg cagcaagaac accttggact
                                                                     1620
tgagetegtt cetetegtge ageaegteee geageteetg eagggtgaae egggggeggt
                                                                     1680
tggggtcctt gagatccatg gccaccttct ctgcgtcgga gatgctctcc tctcccaccg
                                                                     1740
geteegtete aggeteetee teeceattet ggetgtgete eecetgeage etetetegea
                                                                     1800
acttecceag ctetgetege aggetgeeca teteetgete ettggtetge aggtetgeet
                                                                     1860
ccagctccac cttctgttcg atcagggctt tcccctgggc ctccaccacc gtgacccggt
                                                                     1920
gccgaaggtc atggttgatc ttcatcagcc gtgtctgctg ctgctgtaaa gcctcaacgt
                                                                     1980
ectcattttt caggeccage tecetgteet tggegeggat etegtegegt tgtttgteea
                                                                     2040
ecaceteett cagettette ateacetgte getecegete tgacatgeet gteateceag
                                                                     2100
ctacttagaa gactgaggtg ggagaatctt ttgagcctgg gaggttgagg ctatggtgaa
                                                                     2160
ctataattgc gccactgcac tccagcgttg aagacagaga cctcaaagaa ctgaaaacat
                                                                     2220
aggtccacac aaaagcttga gcacgatgtt cacagcagca cgattcacaa cagccaaaag
                                                                     2280.
gtggtgacgt ctcacaggtc catccataga tgagtgggca aacgacatgc agtatggctt
                                                                     2340
catgettetg gaacteetee tetgagaagt tgacateett gtgggagagg ttggtcatga
                                                                     2400
gctgcttgtt ctcctcctgc agctgggcga tctgggagag gaggtcctgc gcctcccctc
                                                                     2460
gccacacate etecaccage tecageteet caggeteete etececatte tggetgtget
                                                                     2520
ecceetgeag cetetetege aactteecea getetgeteg eaggetgeee ateteetget
                                                                     2580
cettigitetg caggietgee tecageteea cettetgite gateaggget trecectagg
                                                                     2640
cotocaccae ogtgaccogg tgccgaaggt catggttgat ottcatcage cgtgtctgct
                                                                     2700
getgetgtaa ageeteaacg teeteatitt teaggeeeag eteeetgtee ttggegegga
                                                                     2760
tetegtegeg tigitigies accasetect teagettett cateacetgi egetecegei
                                                                     2820
ctgacatgcc ttcatgcttc tggaactcct cctctgagaa gttgacatcc ttgtgggaga
                                                                     2880
ggttggtcat gagctgcttg ttctcctcct gcagctgggc gatctgggag aggaggtcct
                                                                     2940
gegeeteece tegecacaca tectecacca getecagete ettetggtge ttgegeteet
                                                                     3000
tetegatgeg gtecateete teeaggegea ggeggteeag eteeaggege agetegteea
                                                                     3060
gctcgggcgc gacgtggtgg cggctgacca gcacctccag gatctccagg acgcgcacga
                                                                     3120
ccttgggcat gaggcgcgcg atggcctcgc agccgtgctg gtcaatgacc cgctcgaact
                                                                     3180
cgtggcccac aagcgacgcg atgtcgtaca cgtccatgac ggtcagctcg gccacgttct
                                                                     3240
tgtccagcgc cggaattcca cc
                                                                     3262
```

```
<210> 3268
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1568)...(248)
<223> similar to gi217730 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3268
ttttatcacc atttctctga cccctcctg tcttaggtct gaataattgg gtcacccata 60
ggaatgcaga acccagggtg ggcagagcag agcagcactt gctggcgata ggcctcgagc 120
ctgtgtttct gagtccttga ggaccacgag ctaacaggag ctggtctgta ggttgctctc
cgtaagcagt gatgcaatgg acgagggatc gtagacactg tcgaattcct catctgagct 240
```

```
cagccetteg tttttgagag etgactcage agetgagegg gaagetttge gecaggagte
                                                                      300
cttctccaga gacttgatcc gggcctggag ctgttcattg acctcatgct gctcctccac
                                                                      360
ctcacgetgg gccttcttcc tcaggccgtc cagtcgctca atttcctctt ctgcttcatc
                                                                      420
cacctgacgc ttcaaagcct tcaccctcag gcttagctgg tctttctggt cattgacatg
                                                                      480
etgeegeteg tetteaatet ggatggatag ttetttaaet tteegeteea gttttegatt
                                                                      540
ggtagactgc agaactgtct tctccctctc ttcagcctgt agccgctcct gcaacaactg
                                                                      600
attctgggac tcaagctgag agaggëtggc actaggcttc tggaagcctt ctgagctggc
                                                                      660
caaccgggtc ttcaggtcct tgttctgtct ctccaaggag attttgtcac actccaggtc
                                                                     , 720
etgeegagea gaeettteet geatgagete tgteeteage tgateeacet ggteeeggee
                                                                      780
acgattcacc cgatctgtta gcagctccac ggtgttcttc tcctcatcta actctgtttc
                                                                      840
cagccgtgag actttttcct cgagaccctt cagctgccgg gccctgtcgt cctgggaacg
                                                                      900
cttcttgttc tctgcctctt gctccagccc ctgcagtcgc tgggccagta gctctttgtc
                                                                      960
cageeggget gtgteeeget cageetggga tgeetgeagg geetgeegea geetetggat
                                                                     1020
ctcatcctga agtcggctca gtcctccaga ggtcttctca gcctcactgg cccaatcctt
                                                                     1080
ggcctggcgc tgggcatctg ccacctcccg ccgggccttt tccttataat cctccagctg
                                                                     1140
ggcctggagc tgctgcaggg cttgcttaga gtcctccccg atcttctcca actccttgtt
                                                                     1200
cagteggtee acagteetgt ecageaaaeg ettetgetee tecageteag eettgeeteg
                                                                     1260
coggagoaco tocogotgot tocottooto otocagggoo oggitoagtg totgotgoto 🦠
                                                                     1320
etgececagg egggecagee ecegetgage etcetetagg egtgeeteea gtgecegett
                                                                     1380
ggctgctgcc agactcccct cctcttcctg ggacgcattc agggcctcct ccagctgctg
                                                                     1440
tttctctgcc tccagccgct gcagcttgtc ccgtagtcgt gcctccaccg cttccccacc
                                                                     1500
atecaceaga cetegagtet cetteagetg etgetecaaa cecaggatge geeggeggaa
                                                                     1560
ttcgtcattt tcctcctggg tctcccgaag cgtcgtctcc actgcggccc
                                                                     1610
```

```
<210> 3269
<211> 2841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1598)
<223> similar to gi306712 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3269
caacgtccca tttgacctac caagcccatt ggacaacggg tctcaaaggg gcacccagcc
                                                                       60
ccaccegeca eggattteac ecagtteeat tgetgeecae gagaceattt egeggetggt
                                                                      120
gggcttctca gcgggtcaag tgccagtacc tggatctcat caaaaaggga ccccagcaag
                                                                      180
ctgttcaatg aggagcggtt gatcgacaag accaaggtga catatctgaa gtggctgcct
                                                                      240
gagtoggaga geotgtteet ggeateacae geoagtggee acctgtacet gtacaacgte
                                                                      300
agccacccct gcgcctcggc cccgccccag tacagcctgc tgaagcaggt catggggctt
                                                                      360
ctctttctat gctgccaaga gcaaggcacc ccgcaacccg ctggccaagt gggcggtggg
                                                                      420
tgaggggccc ctcaacgagt tegecttete geeegatgge eggeacetgg cetgtgtgag
                                                                      480
ccaggatggc tgcctgcgcg tcttccactt cgactccatg ctcctgcgtg ggctcatgaa
                                                                      540
gagctacttt gggggcctgc tgtgtgtgtg ctggagccct gacggccgct acgtggtgac
                                                                      600
gggtggcgaa gatgacctgg tcaccgtgtg gtccttcacc gagggccgcg tggtggctcg
                                                                      660
aggecatgge cacaagteet gggtcaacge tgtggeettt gaccectaca ccacaaggge
                                                                      720
agaggaggcg gcgacagcag ccggtgctga tggggagcgg agcggcgaag aggaggagga
                                                                      780
ggagcccgag gctgcgggca caggctcggc cgggggcgcc ccgctctctc cactgcccaa
                                                                      840
```

```
ggctggctcc attacttacc gctttggctc ggcgggccag gacacgcagt tctgcctgtg
                                                                      900
ggacctcact gaagacgtgc tctacccgca cccgcccctg gcccgcaccc gcaccctccc
                                                                      960
tggcacacct ggcaccacgc caccggccgc cagcagetcg aggggtggcg agcctggccc
                                                                     1020
aggeceeetg cetegetege tgteeegete caacagtete eegeacecag etggeggggg
                                                                     1080
caaggeggge ggeeegggtg tggeggeaga geetggeaca ceatteagea ttggeegett
                                                                     1140
cgccacgctc acactgcagg agcggcggga ccggggggca gagaaggagc acaagcgcta
                                                                     1200
Ccacagootg ggcaacatca gccggggtgg cagtggcggc agtggcagtg gtgggqagaa
                                                                     1260
gcccagcggc cctgttcccc gcagccgcct ggaccccgcc aaggtgctgg gcactgcgct
                                                                     1320
gtgcccgcgc atccacgagg tgcccctgct ggagcccctt gtgtgcaaga agatcgccca
                                                                     1380
ggagcggctc acagtcctcc tgttcctgga ggactgcatc atcactgcct gccaggaggg
                                                                     1440
cctcatctgc acctgggccc ggccgggcaa ggcgttcaca gacgaggaga ccgaggccca
                                                                     1500
gacaggggaa ggaagttggc ccaggtcacc cagcaagtca gtggtagagg gcatctcctc
                                                                     1560
ccaaccagge aacteceega gtggcacagt ggtgtgaage catggatate gggccccce
                                                                     1620
aaccccatge ecceageete etageeataa eccteeetge tgaeeteaca gateaaegta
                                                                     1680
ttaacaagac taaccatgat ggatggactg ctccagtccc cccacctgca caaaatttgg
                                                                     1740
gggccccca gactggcccg gacacgggcg atgtaatagc ccttgtggcc tcagccttgt
                                                                     1800
cccccaccca ctgccaagta caatgacctc ttcctctgaa acatcagtgt taccctcatc
                                                                     1860
cctgtcccca gcatgtgact ggtcactcct ggggagacac tccccgcccc tgccacaaga
                                                                     1920
gccccaggtc tgcagtgtgc ccctcagttg agtgggcagg gccgggggtg gtccagccct
                                                                     1980
cgcccggccc ccaccccagc tgcccttgct attgtctgtg cttttgaaga gtgttaaatt
                                                                     2040
atggaageee eteaggttee teeetgteee geaggaeete ttatttatae taaagtteee
                                                                     2100
tgttttctca gcgggtctgt ccccttcgga ggagatgatg tagaggacct gtgtgtgtac
                                                                     2160
tetgtggtte taggeagtee gettteecea gaggaggagt geaggeetge teecageeca
                                                                     2220
gegeeteeca eecettttea tageaggaaa ageeggagee eagggaggga aeggaeetge
                                                                     2280
gagtcacaca actggtgacc cacaccagcg gctggagcag gaccctcttg gggagaagag
                                                                     2340
catcctgccc gcagccaggg cccctcatca aagtcctcgg tgttttttaa attatcagaa
                                                                     2400
ctgcccagga ccacgtttcc caggccctgc ccagctggga ctcctcggtc cttgcctct
                                                                     2460
agtttctcag gcctggccct ctcaaggccc aggcacccca ggccggttgg aggccccgac
                                                                     2520
ttccactctg gagaaccgtc caccctggaa aggagagctc agattcctct tggctctcgg
                                                                     2580
ageogeaggg agtgtgtett coegegeeac cotecacec cogaaatgtt totgttteta
                                                                     2640
atcccagcct gggcaggaat gtggctcccc ggccaggggc caaggagcta ttttggggtc
                                                                     2700
tegtttgede agggaggget tggetecade actttected eccageettt gggcagcagg
                                                                     2760
teacceetgt teaggetetg agggtgeece etectggtee tgteeteace acceetteee
                                                                     2820
cacctcctgg gaaaaaaaa a
                                                                     2841
```

```
<210> 3270
<211> 2443
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (323)...(1840)
<223> similar to gi3327222 in the genepept database release 114,
```

```
<400> 3270
gtgttgggca attccgctcg agctgaagcc gacagtgtct gtgacttccc tctctgttgc 60
acttaccaac cctctttcca tgtctggaat gagaaaagaa aaagagcagc attgccagag 120
cccaggtttg tcatctcca ggcatctcag aaccagtatc ctcttggaga gcattcaagg 180
```

Run with FASTXY 3.3t00, default parameters

```
aaaaagtcca gaaagtgcgc tgtcagacca cgtcactaag agtttcatca agctcttaga
                                                                      240
gategeteet geagggeeca etgetgtget tttetgaaac atceatttat taacagagee
                                                                      300
ccactatttt aacatgttcc aggccctagc acaaaacaca gatcttaaag aacgcttacg
                                                                      360
cagaatccat gccgagtctc tgctcctcga ctcccccgct gtcgccaagt cgggtgacaa
                                                                      420
tctggcagag gaaaactcca gagatggaaa accgagctct agttcatcag ctttctaatg
                                                                      480
aaagtaggac tetteeatea ettgaeteee tttetggagt ttttttttga tgetteaggg
                                                                      540
aagttetgtt ateteeaage tetteagaaa aegagattte tgatgatgae teatatgtea
                                                                      600
gtgacataag tgataatett teettagata ateteagtaa tgatttagat aatgagagae
                                                                      660
agacettggg geetgteett gatagtggte gggaagegaa gteeeggaga aqaaegtgee
                                                                      720
tgccggcgcc ctgcccgagc agcagtaaca tcagcctgtg gaacatcctg aggaacaaca
                                                                      780
tegggaagga cetgtecaag gtggecatge eggtggaget gaacgagece etgaacaege
                                                                      840
tgcagaggct ctgcgaggag ctggagtaca gcgagctcct ggacaaggcc gcgcagattc
                                                                      900
ecagecect ggaaaggatg gtatatgtgg cageetttge catateageg tatgeateta
                                                                      960
gctactaccg agctggaagc aagccattta atccggttct tggagaaaca tatgaatgta
                                                                     1020
ttcgggagga caagggcttc cagttttttt cagaacaggt cagccaccat ccgcctatct
                                                                     1080
ctgcgtgtca tgctgagtct agaaattttg ttttctggca agatgtgaga tggaaaaaca
                                                                     1140
aattctgggg caaatccatg gaaattgttc caattggcac aacccatgtg actctgccag
                                                                     1200
tttttgggga tcattttgag tggaacaaag tgacctcttg catccataac atcttaagcg
                                                                     1260
ggcagaggtg gattgagcac tatggagaga ttgtcatcaa gaacctgcat gatgattcct
                                                                     1320
gctactgcaa agtgaatttt ataaaggcaa aatactggag cactaatgcc catgagattg
                                                                     1380
aaggcacagt gtttgacagg agtggaaaag cggttcatcg gctgtttggg aaatggcatg
                                                                     1440
aaagcatcta ctgtggcggc ggctcctctt ctgcctgtgt atggagagca aatcctatgc
                                                                     1500
cgaaaggcta cgagcaatac tatagcttca cacagtttgc gctggaatta aatqaaatqq
                                                                     1560
atccatcatc aaagtettta ttgccaccta ctgacactcg atttaggeca gaccagaggt
                                                                     1620
ttctagagga agggaactta gaagaagctg aaatacaaaa gcagaggatt gaacaactgc
                                                                     1680
agagagaaag gcggcgggtc ttataagaaa atcatgtgga gcaccagcct cggtttttca
                                                                     1740
ggaaatccga cgatgactct tgggtgagca acggcaccta tttggaactt agaaaagatc
                                                                     1800
ttggtttttc caaactggac catcctgtct tatggtgaaa aagtaaagaa qaaaqataac
                                                                     1860
attagtgtat tteteetgtg ettgeettet gaagtggeae aaacetgtgt ttatatattt
                                                                     1920
aaaagatact ctaggatgat cacttgtgct tatcttagca ttgtaactct ttaagtctat
                                                                     1980
attiticetea gigegittet tiacaattie aaatgitaee eigatigitt atatgaatgi-
                                                                     2040
agaacacctt gacatttttt tttatatata aactatttaa taaaaatgaa agattgaatg
                                                                     2100
ttcatgtgtg ggttaaaaaa agaagcttta acactaattt tccaaaggtt agggaagatt
                                                                     2160
ccaattaaat ttatgcctta taaaattatg ttgtagaaaa aaaatcaacc tctcccaggt
                                                                     2220
gcattaagaa ataagaatto ccagggttac tcacccatgo gtaagctaco caagtttaat
                                                                     2280
ttggtagctg aaatatcttt ttgcctcaga cagctcttga attgctcata cagaacaatt
                                                                     2340
ctgctggtgc tggagtctga agaatatttt catttgcatt ttagtggtta gggagaggat
                                                                     2400
ataagattaa tggaatgtat atttttatat aagacgtata cqq
                                                                     2443
```

```
<210> 3271
<211> 3639
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(717)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

tttttttttt ttgagacaga gtcttgctat gttgcccagg caggtcttga gctcctgggc 60 ttaggggatc ctcccgcctc agcctcccaa gtagttggga ctacaggcac acactactac 120 tottggtttg cotatttta aatcaggttg tttgttttct tattattgtg ttctctacac 180 tgtaggatat tctacctttc ctagaatttc atgtaaatgg actcagacat actgttgtgt 240 ctggcctctt ttgttcagtg taatgttttt gagcttcatc cttgcatgtt atgtgtatca 300 gtgattgatt caatttttat tgctgcatag tattggattg tatagctata ccacaatttg 360 tttattcatt ctcctgttga tggaatattg gttgtttcca qtatttaqct attattattt 420 tattttttt ttttgagacg gagtctcgct ctgtcgccca ggctggagtg cagtggcggg 480 atctcggctc actgcaaget ccgcctcccg ggttcacgcc attctcctgc ctcagcctcc 540 caagtagetg ggactacagg cgcccgccac tacgcccggc taattttttg tatttttagt 600 agagacgggg tttcaccgtt ttagccggga tggtctcgat ctcctgacct cgtgatccgc 660 ccgcctcggc ctcccaaagt gctgggatta caggcgtgag ccaccgcgcc cggccaaaaa 720 gaagaaatat taagttgtcc ataatctgtt atatctaact attataaagt ataaataaaa 780 caaaataagt tttacattac ttgtttctgt cacattgttc aaaattcttt tgggcttaaa 840 gccaactatg aattttagta gagtaggagg acaatgggaa acagattctt tttttgttgt 900 tattgaaatg taagcaactt gcccttaaaa tagtatgaat atccagttca ggtaacaact 960 ttcactttta attagtcaaa tatatattaa atataaaaat ctaatgctgt acagatgtga 1020 ctttggacat tttaagtatt agtttattca gaaacgcctt taaaaatcag tgtgtataga 1080 actageteat ttettaactg teaaatttag aagtgeaaca gtgggtette agagagaata 1140 tgcccaagaa aaactggata aaaagactgg gtaaatacat caaatgaaac agtgattcac 1200 ttttgacaag actgaaatat aagtatataa tcactgatgc atatttattc agtaggccca 1260 tgtgattatg tggtttttaa ctaacagcat ttatttttgc aaactgcttg gcattcctcc 1320. aagggaaagg agcttctaga ctacaaacac tgagcacata catcttaaat taacacatga 1380 attgcatatg gattgttgat atgcttttag agtcttgtct ctacagaaga aaaacacgtt 1440 cctggggtcc atgccttttt cagaggcaca atctatagct tggaacttaa ttgctgtcca 1500 tggtatctgg cctttaatta taagaaattg ttgacacccc aatacagggt gcatctaaat 1560 acataatgca agaaaggagg ttttagtggt taaacttcgg cacgcttaaa gattttagga 1620 atgtaattat gccattaggc agtatttctt tgtctatgga cttaaaaagt tttcttgggg 1680 cattttaaag aggtttatca aagttatatt gttgaaaaac tattttccct ggaaataatg 1740 teceeteett eccaeettet geettgatat tettaetgga aaaaaagtga aattgtteag 1800 aattacaacc atatagggtt tccaggcata gcatgggcac attgggaatg gaagactaga 1860 agaccccage aaggaatgta ggtacattaa ttgctgccta ccctgagaaa taactctgag 1920 tttcttctcc caagtattcc tcaaggatcc attcattgta gagtcaacag atgtctttta 1980 gaattcatta taataagaag tccatgaaca tacacacact atccttgaat agttttacat 2040 tatatttttt ctaggtagtt cctgaatact ttaatgagct taataaatga gaaaatgtat 2100 tgaaaggtct ttgtaagtta ctatataaat atgacatgtg ttttaataat atctgaattt 2160 ggctgggaac aatggctcat gcctgcaatc ccagcactta gggaggccaa ggcgggagga 2220 tecettgage teaggagttt gagaceagee tgageaaaat etetaaaaaa aaaattteta 2280 ttagccaggt gtggtggcat gcgcctgtac tgtagtctca gctactcggg aggctgaggc 2340 aggagaattg cttgaaccca ggaggcagca gttgcagtga gctgagatta cgccactaca 2400 ctccageetg gtgacagage gagactatet ecagaaaaaa aagaaaaaaa gaaaggaaat 2460 attgagtact teetetatgt aaaceeetgt attgggtget gaaagagatg gaattataag 2520 gaacttaaca tttagtaaat gggccaggcg cggtggctca cgcctgtaat cccagcactt 2580[°] tgggaggccg aggcgggcgg atcacgaggt caggagatcg agaccatcct ggctaacaca. 2640 gtgaaacccc gtctctacta aaaatacaaa aaattagccg ggcgtggtgg cgggcgcctg 2700 tagtcccagc tactcgggag gctgaggcag gagaatggcg tgaacccggg aggcggagct 2760 tgcagtgagc cgagatcgcg ccactgcact ccagcctggg cgacagagcg agactccgtc 2820 tcaaaaaaaa aaaaaagaaa ccccgtctct actaaaaaat acaaaaatta gccgggcgta 2880 gtggtgggcg cctgtggtcc cagctacttg ggaggctgag gcaggagaat ggcgtggacc 2940 caggaggegg agettgeagt gageegagat tgeaceattg caeteeagee tgggeaacag 3000 agcaagactc cgtctcaaaa aaaaaaaaaa ttatcaatac caaatatgat acagttatgt 3060 aatacccatt ttgcatatgc acagtggaaa tactgtaaaa actacaagat gaaagaaaac 3120 cgactggcca gaactttaaa tttcagacta atccatgata aaaatctaga tgataaaaaa 3180 caaaaataaa attaacaaaa tagataacto gatatoottt coatattoag togtotacta 3240 acatgecate tecaaacaaa tecattaeet caaaagagga agaaaatggg ecaggegegg 3300 tggctcatgc ctgtaatccc agcactttgg gaggccaagg cgggcagatc acgaggtcag 3360

```
gagatcgagaccatcctggctaacacggtgaaaccccgtctctactaaaaatacaaaaaaattagctgggcatggtggcgggcgcctgtagtcccagctactcaggaggctgagacaggagaatggcgtgaacccaggaggtggagcttgcaatgagcggagatcgcgcactgcactccagcctgggcgacagagcaagactctgtctcaaaaaaaaaaacaaaccaaaccacccaaaaggacaccaaaaaacactcctcatgcccaagtcataccc
```

```
<210> 3272
<211> 1829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1712)...(957)
<223> similar to gi6003574 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3272 tttttttttt ttactgtaaa ttttagaaat gtttatttta gaaacacaca aagctaaaat 60 gcatatttca gtccaacaac ctagagagaa gaaataggga gctacatgtt tttgtttagt 120 cttgtttttt cctcaaaatc catccctaag agtcaggagc tacaagttta taggtacgca 180 tttgtatgaa tatgcttgcc atggattcta aggacctagg aacatctagg aatacaggac 240 attacatttt tattttgaaa aaatatttaa attaaattta catgtacaat ataatatcac 300 tttcaggaac aaaaaaacat taatggaaag taggaatata cttaaaacaa aattatttt 360 acttttgagg tcaaattcta caccctggaa aaagtcagaa gcccatacta gagttttgta 420 gaagtttttt taaaaatgct tttaaaattt agcaaggctg caaagtctgt caataaataa 480 atcaaattac tatctgtcag taagctatga agtccacagt aagtaccaat gcaaactgaa 540 cagatttaga aagtcaatcc atactttcta gcatcatcat gaaaactcca tgactgaccg 600 acacatcatt tecaatgtta teateaagge eteagtgtgt acceeaggae acaettteaa 660 attctcaggc agttccttaa gaatgtgtgg gagtttctgc aatgtcttta tatttccagc 720 ataaagatcc agtaaccagt cagtatgaac actggtggtt tctttatgac ttttacaagc 780 cataagcagt toatttagat gagttaacco tttggaagot aaaatgaact ctgaagataa. 840 atcaaaaatt gaacaaaaat ttagcaacat cctactaagt aaaaaggagc caaattcaag 900 ttgctggtaa tgaaaatgtt tctctgcttg tgcatgaaag ttctccactg tatcttctat 960 ttttgtaata gcaaacagtt cttctttgat ttgaggtgaa accacataat ccaagggcaa 1020 ttctccctta gcattcctct gttgtaaaag cactgggccc ccatgctgta gtagcagctt 1080 gccaatttct acatgtccgt ttgacagtgc atcatgcaaa ggagtcaccc cgtccacttg 1140 agtgagcaga tctacctctg gacaacgttg caaaatttcc tggacacaca ctgtgttgcc 1200 atagttacag getteatgea aaggegteea geeageattg tetttaaeat tgatgtetat 1260 teetggeaaa gagagaagaa gaateaattt eteeaettgg ttatttatge aagetetatg 1320 cagggctgtt tctcctttta gattagtctt gtgaaaattc atcttttaa ctacagaggg 1380 gcaattctcc ttggaacatg acaattctcc ttctgacttc tttttcaatt tttttaatga 1440 tgaggaacat ttagcaaggt tcaggtctag taactctggc agcccttcga cttgtttttg 1500 tttagtacca ttcagcatta gtaaggttct ctgagagtca aaacaaggcc gctgtcctat 1560 tttctttgac acctgaatct ttccagaccc aagcacacca gttttcccca aggctggtaa 1620 ataggaatat accattttct gaagagagag tggctcagaa gaaacactgc cagagctctg 1680 tagacacaac tttttaaaga ctgcctctgc aacaaacatt tgaagccagg aggaggaaaa 1740 ggagcaaatg aaaatctcta attcctgtga agaaaagtca tcacacgaaa gagaaacata 1800 acttcctaag tcatcagaca tgtgtcgcc 1829

```
<210> 3273
<211> 672
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(646)
<223> similar to gi488555 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3273 tacctcatca ggcatcagag gattcatact ggttagaagc tctatggctg caaccagtgt 60 cagaaacttt tcaggaatat cgctggcctc attaggcacc agaggactca tactggtgag 120 aagccctatg agtgtaatca gtgtggcaaa gccttcaggg acagctcctg tctgaccaag 180 caccagagta attcacacta aggagacccc atatcagtgt ccagaatgtg ggaagtcctt 240 caagcagaac teteacetgg cagtacatea gagactecat ageagggagg gteecageeg 300 gtgtcctcag tgtggaaaaa tgttccaaaa gagctcatcc cttgttcgac atcaaagagc 360 acacctggga gagcaaccca tggaaacata atggttgggg gccacatgag tcttccagtt 420 cacteteact cetgtgttta ggaggegtgt ettagatetg acteetetet ggteagtaga 480 aaagaatcct ttaagctatc cagtgaattg atgaatgtga gacattgctg agccacactg 540 ttaagtetge teattgggga acteeagaga caacttagge atgagggeag aaaagtettt 600 ggggatgatt cagtctgtac cagacatgac aacacacac ctggaatgaa atgtgcaaac 660 atgggggtga ct 672

```
<210> 3274
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1597)...(227)
<223> similar to gi1575333 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3274

ttttttttt ttcgtattc aagggtttt attctgagca gtaggtacaa aaaataatga 60
catagttgtg tctaattctg tatagttcag gcaccetcca caggetgtca atctctgatt 120
tgatctactt ttaccagatt taacagatce ttgaatttac tttactgtat atacttcett 180
cttgctcaca ttgggaatca aactaatget ggaaacatge atctcagac ttcattgagg 240
aattccagat tgagacacge tgggatgtgg attgagtcca tggttagaga agatggatta 300
aatggaaaca aaacaggaaa catgtgettg gcatctaata gcagttgetg agggtcattc
```

```
cgctcttgta gttgtgcctg gattgttcgt ataaaggcca ctgttacccg ttcttcaaat
                                                                       420
tcattcaggg gagtataaag gtttaaaatt ttgacaatct gctgggtgct gagggaggta
                                                                       480
cacagggage agatageete tgegteetee tgggttttet tetttaattg caggagetgg
                                                                       540
gctgcttgga tcagaggttc catggtctga actgctccac tctggtgaag gtttcttccc
                                                                       600
cgaagccact cctcaagctg acttatattg tacctgagtt gcatgcctgt gctccaagag
                                                                       660
cagacgtect teegeaggag caggteatta agagteactg egttgateat gtagaagage
                                                                       720
tgtttgaata cctgcaggat gatctcaggg tccaagccct ggtcacacat gactgtatga
                                                                       780
aaggcattca totggoggat gatagettce aggoggtatg agttatecte atotgcoatg
                                                                       840
ctggaggagt gcttctggga gccagtgggc ttcacaccag atagaccctg aatgctctaa
                                                                       900
ttttccaaca tggcagaaac tatcatcggc tgtaacacac cctcggcaat tttaatgagc
                                                                       960
tgctggtaga tctgaatgga aaggtcacgt caggcacctg acggtattcg gtgaggtcaa
                                                                      1020
aattettaag acagtgttea attetgettt geagtgttat gagteatgaa geeeteatee
                                                                      1080
ccgctgtact gcttcagaca gtgaagaagg cggcaggtgt tggataacca gaatgacgtc
                                                                      1140<sup>.</sup>
atctcaaagt catcattgtg ctttttcagg actttcttaa tgccgttgat ggtggaggtc
                                                                      1200
agcagggagt gcaccttgag atcgtcgttg gtgtagtccc gcgtgccgga tgcacatgta
                                                                      1260
gaggatgtag gcggggagac agggcactgt gcccgacagc atctggggct tcaagtctgt
                                                                      1320
caccaggttc cggatgagga gggcctcgtc ctctttgtgg tactccagca tgccctggaa
                                                                      1380
atcettetet tteegetgga cegtgaeetg cetgttgage teatggeget teeteteaet
                                                                      1440
ctgggccaat gcctgggcag cttctaggtc ctgggctttc ttcatgtaaa tcttcagttg
                                                                      1500
ctttttgage tteeteteat tetttteeag ettttetace agttettaa ggteeagatt
                                                                      1560
ctcgttggtc agccgggata tttcctgctg aacgccgctc gtgcc
                                                                      1605
```

```
<210> 3275
<211> 764
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (675)...(226)
<223> similar to gi4164002 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3275
coccettttt ttttttttc aaaagtgttc tgtttaatac gctttgtctg gtagtgcttg
                                                                       60
ggtgcctgtg gttggtttct ctcactggaa ccagtcctgg gccccactcg cctggcttcc
                                                                      120
tecagtegee ecaggteetg gggetggtgt gteagaaget geetttgtee tetecattea
                                                                      180
tecatecttg ggeetgtetg geetatgatg cecteattea geteteaggg tecagaggtg
                                                                      240
actggtgtgg atcctgctcg ctgtgccaag atggccctcc agatgcggca taccatccct
                                                                      300
cccctgtggg taatggactc agtgtggctc agccagaagg tggccctgga ctctatcttg
                                                                      360
cacacactgt etgeccagtg ecceetetgt ecctagggga eccaggtgee eetttggttt
                                                                      420
ccaggaagga acctaggcag gcctgcagtt ggccaggatg aggccatatg catggttcac
                                                                      480
acttgggggg cccaggatgt acctgatgcg ggtgtagatg aggtcatctc gagtggcata
                                                                      540
ggtgagcaga gtgtggaggg tgaagctatg gttcaacagc tggatgtggt caaagacccg
                                                                      600
cagaaagagg gaaataagaa attacagaaa gatgtgtcga gacccaggta ctagctctgc
                                                                      660
tetgttgeca aaataatgag geagateaca eeettetggg eeteagttit eteateeata
                                                                      720
caatgggacg agaatactaa gtgttcttct ggtagtgaga ttct
                                                                      764
```

```
<210> 3276
<211> 2281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(1054)
<223> similar to gi3877677 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3276
atggctgatc gggggaggcc gagaaccgca gggactggcc gagaaatctc ctttacagac
                                                                       60
aataggtgaa gaacaaaccc agaatcccta cactgaactg ctagtactga aggctcatca
                                                                      120
tgatattgta cgatttctgg tacagttaga tgactacaga tttgcatctg ctggtgatga
                                                                      180
tggaattgta gttgtgtgga atgcccagac aggggaaaaa cttttagaac tgaatggaca
                                                                      240
cactcaaaag ataacagcta ttattacatt teetteettg gaatettgtg aagagaaaaa
                                                                      300
teaactcate ttgacageet etgetgatag aacagttatt gtgtgggatg gtgatactae
                                                                      360
cagacaagtt cagagaatat catgetteca gtetactgta aagtgtttaa etgttettea
                                                                      420
gagactagat gtttggcttt ctggtgggaa tgacctgtgt gtgtggaacc gaaaattaga
                                                                      480
teteetgtgt aagaetagee acetttetga tacaggtatt aagtgeettt ggttgaaata
                                                                      540
ccctaagaac ctgtgttgtg gcagcagttg gcaaagaact gataattttc aggttggtag
                                                                      600
cacccacaga aggatcacta gaatgggata ttcttgaagt taagcgcctc cttgatcacc
                                                                      660
aggataatat teteteattg attaatgtea atgatttgag ttttgteace ggeteecacg
                                                                      720
toggagaget gateatotigg gatgooctgg actggaceat geaggootat gaacgeaact
                                                                      780
tetgggacce atetecacaa etggacacce aacaagaaat aaaactetgt caaaaatcaa
                                                                      840
atgacatttc tattcatcat ttcacatgtg atgaagagaa tgtatttgct gcagttggaa
                                                                      900
ggggtttata cgtgtatagc cttcaaatga agcgtgtgat tgcctgccag aaaactgcac
                                                                      960
atgactecaa tgteetgeac attgeeagae tteeaaacag geagttaate teatgeteag
                                                                     1020
aagatggcag tgtacgcatt tgggagttaa gagaaaaaca gcagcttgca gctgagcctg
                                                                     1080
taccaacagg tttttttaac atgtggggat ttggaagagt cagcaaccaa gccagccaac
                                                                     1140
ctgttaaaaa gcagcaagaa aatgctactt catgttcact ggagcttatt ggagatttga
                                                                     1200
ttggacactc atcatctgtg gagatgtttc tatactttga agatcatgga ctagtgacgt
                                                                     1260
geteegetga teateteatt attitgtgga aaaatggaga gegagaatet ggattgegea
                                                                     1320
gtttaagatt atttcaaaaa ttagaggaga atggtgactt ataccttgct gtctagttta
                                                                     1380
aggaattaaa aatacacatg catgaacctt gaacatcaaa tatcgggtac tactctgaaa
                                                                     1440
accattaata tattgatcac ttaaattggt aattttttt gtcagtccat aaaattctac
                                                                     1500
atgtttaaat tttttgtgga cctaccaacc aggaacatgt tgcttctcag gtcctagtat
                                                                     1560
atcctccaaa gaatatacca caagtttttc catttgactt tgagctgctg ttgaagtggt
                                                                     1620
gagtgctgtg ttttgagctt attttgaacc tagatccttg tgaaaggtac aaatagaggt
                                                                     1680
aatagttaag ttatggcatt tattagaagt tttattattt ggcttccttt agaattattq
                                                                     1740
tgaagtttaa aaatagcett teteetgeaa atttteetag tetttagtaa etgttagtgt
                                                                     1800
totatatago acaaactiga atototoago caaaaaaggg aacatatata otgittaagt
                                                                     1860
atggcaagtt ttctttggta ccaatttgtt tagataattt taaaaatgtt ttttagttct
                                                                     1920
agctactaaa acctgtatga actcaaatgg ataggcatct tgtgagggtg tgttttccc
                                                                     1980
agtgtgaatt ggcttgaaga gccatgggct aaatgggtac tagaacaaca actgcccctc
                                                                     2040
atgtacgcca aggatgagct ctagatcatt tgagaggcac agtgtttccg qaqtcaqqqa
                                                                     2100
ctggcagctg agcgcaactg ccccatctga ccactgactc aaatacgaac tgcttgagac
                                                                     2160
agacttettt tatgtagtte tttgcagtgt ccattgagae actataacca gcettgtaac
                                                                     2220
aatatgtttt ctccttttgg tgctaaaaaa taaaaatatt agaaagtagt ctaaaaaaaa
                                                                     2280
                                                                     2281
```

```
<210> 3277
<211> 1206
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16)...(879)
<223> similar to gi3005087 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3277
agtcaggagt cttcagacag tctagctgca gagattgtta cacctgaaat cagggagaaa
                                                                       60
cttattcgtc ttcagcatga gaataagatg ttaaagctta accaagaagg ttcggacaat
                                                                      120
gaaaaaatag cottattgca gagcottota gatgatgcaa atotacgcaa gaatgaactg
                                                                      180
gagacagaga ataggtactt gtgcccataa atttccctct tactacggct tttgctgtat
                                                                      240
cccatagatt tcggctggtg aatcaaagac ttctggaagt acagtcacaa gttgaagaat
                                                                      300
tacaaaaatc tttacaggat caaggctcaa aagcagaaga ttcagtcctt ctaaaaaaga
                                                                      360
agettgaaga acatetagag aagetgeatg aggeeaataa tgaactacag aagaagagag
                                                                      420
ccattattga agatctcgag ccaagattta acaacagctc cttaaaaaatt gaagaattac
                                                                      480
aagaagcttt acgaaagaaa gaggaagaaa tgaagcaaat ggaagaacga tacaaaaaat
                                                                      540
acttagagaa agccaaaagt gtcatccgta ctttagatcc taaacagaat caaggagcag
                                                                      600
caccagaaat acaagctctt aaaaatcagc tccaggaacg agaccgactg ttccactcat
                                                                      660
tagagaaaga atatgagaaa acaaagagtc agagagagat ggaagagaaa tatattgtta
                                                                      720
gtgcctggta caatatggga atgaccctgc ataaaaaggc agctgaagat agactggcaa
                                                                      780,
gcacaggete agggeagtea tttetggega ggeagaggea agegaecage ageagaagat
                                                                      840
catacccagg ccacgtgcag ccggccacag caaggtagag aagttgtgcc gctcaatcac
                                                                      900
agacacetge acceacaaca tacttetgtt acacacaaga acattteagg aaacteagee
                                                                      960
agettatttt ttgtttetet tetatgteaa taettagtgt tteteatttt gaggaetttt
                                                                     1020
tetetetet gtatettigt titagittet tiggittita titigtagie etticagita
                                                                     1080
tttttaatgt gccaaaaatt tgtacatgtt caattaaaaa tgttgtataa tagtgtaata
                                                                     1140
cttttctttg tatgaaaatg tcctcttctt caaaggtata ggctttgtaa tgaattagat
                                                                     1200
tttctg
                                                                     1206
```

```
<210> 3278
<211> 1159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1161)...(822)
<223> similar to gi3043572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3278
ggaagccagc tgggccagac caggaaggag cctgaggcac agcaccaagg catggggtag
                                                                       60
ggtgggcttt gaggcacggc ctccccatgc ccagacccag gcccaaacag gaggctcctg
                                                                      120
tgcaccagca agtgcagcaa agctggctgc agtgacaagg aagtcagagg gagggctggt
                                                                      180
ttgcctcaac cctcgccctg gatgtggcaa aagataccac accgaaggaa gctgtagggg
                                                                      240
atctgggact tagtcagget agctaaggge actgagtgat tacagggeaa ggccacagag
                                                                      300
cggcaggaag ttgtaagtgc aggggccagg cacagtctga gtggagagcc atgatggcac
                                                                      360
teatecetgg etggeteetg ggeeeaggee ettgeteaga atacagtgee eaggeeegee
                                                                      420
tgggcattgc cttaattcct gtctgaggct gccttccgtc atcctcctca agctgactgc
                                                                      480
tatcagcagg agaagggaat gcagaaccac acccaccca actccagtgt ctccagaact
                                                                      540
gagcagggac cetececatg aeggagacag acaacecaat ggcagggeet gggggagtte
                                                                      600
taaccteceg ageccaagee tgactteeet teeeteteea gatactgagg aaagtgggtt
                                                                      660
ggaggtgggc catgagggtg ggggacaggg ggagggagag ccatttccta agaagagccc
                                                                      720
aggttgtctc agcccaggga gactggtttc aggagctgtt ccttcagaaa ggacgatgga
                                                                      780
aatggaagtc acagcagggc tggggaactg gggactggtt aggttggacc catgggtgca
                                                                      840
gcacceteca aactggtgte agageetgea gatgagteee gggaggageg geeetgeagg
                                                                      900
aageggatga tetteteaat ggtggeetee tggtattegt gggaceaeet gtgggeaeag
                                                                      960
gagccaatgt ggttcagaca gctgggcaga gggagctgct agtcagctgt ttgcccacac
                                                                     1020
totgootgto atggtgattt gtaccotaco cocotggtoo cagggoootg gggotcactt
                                                                     1080
gataccgttg aaagtaagca cagcctgcat gtcctcaggc aggacctggg gctcaggcca
                                                                     1140
ctcgaagcca tcaatgatg
                                                                     1159
```

```
<210> 3279
<211> 622
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(251)
<223> similar to gil066818 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3279
caactgtctg cctgcctggt tgcctaaacc agagctgtgg ctccaactgc tgccagccct
                                                                60
getgeegeee ageetgetgt gagaceaett getteeagee caeetgtgtg tacagetget
                                                               120
gtcagccttt ttgctgctga tcaagtcccg agagaaccac catcctcaca caacaacttt
                                                               180
240
totoacccaa atttttatga attototaca tgtttaaaat ottgggaato tgottgaggg
                                                               300
agggcagaat acttcatcct gattctcttt ttccttacac tttgtggatc atgtgccagc
                                                               360
ttcgtgtgtt ctcaattttg agtcatggtc tcagctttga ctcaaaagtc aagagcttca
                                                               420
ttctctgctt ctaaggaatt taggtttctg caactgatca ataatctttg caatctttt
                                                               480
tttggttttc aatatcctcc tcatcgttcc ttggtatcct tcttcttct tttcatgata
                                                               540
aatttgtgtt gtgtccctgg gtagcagaaa atccttaccc ataatgtttc tgaataaact
                                                               600
ctgaaccatc ctcatctcaa aa
                                                               622
```

```
<210> 3280
<211> 3258
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2516)
<223> similar to gi5912060 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3280
ctttgaggtc ttgtggtctg attcttcaat aacatcagta accaaatctt cctctgaagt
                                                                       60
gacggaattt atttcaaagc tatgtcagct ctatcctgaa gagaacttgg agaaactcat
                                                                      120
teettgetta getggteegg acgeatttta tgtggagega aaccaegtgg atetggacte
                                                                      180
aggeetgagg tacetggeet cattacette teaegtgttg aaaaatgaee atgteaggag
                                                                      240
gttteteage aetteetete eeceacagea getteagagt eeaagteetg geaateeete
                                                                      300
cctttctaaa gtaggtaccg tgatgggcgt gtctggaagg cctgtgtgtg gagtggctgg
                                                                      360
tatecegtee tegeagageg gageeeagea ceaegggeag eaceeggeeg geteageege
                                                                      420
ccccttgcct cactgctccc atgcgggcag cgcgggctca gccctggcct accggaccca
                                                                      480
gatggacaca teacetgeca teeteatgee ttecagtetg cagaccecte agacceagga
                                                                      540
gcagaatggg attctagact ggcttaggaa actgcgtttg cacaagtatt accccgtctt
                                                                      600
taagcagctc tccatggaga agtttttgag ccttactgaa gaagatctga ataaatttga
                                                                      660
gtctcttacc atgggggcaa agaagaagct caagacccag ctggagctgg aaaaggagaa
                                                                      720
gtcagagaga cggtgcctga acccctcggc cccgccgctg gtcaccagca gtggtgtggc
                                                                      780
tegagtgece eccaecagee aegtegggee egtgeagteg gggeggggea gecatgeage
                                                                      840
agagetgegg gtggaagtgg ageageeeca teaceagetg eecegggaag geagtteete
                                                                      900
ggagtactcc ageteeteet ecageeceat gggggtacag geeegggaag agageteega
                                                                      960
cagcgctgag gagaatgaca gacgtgtgga gattcacttg gagagctctg acaaggagaa
                                                                     1020
geoggtgatg etgetgaate actteactte cagtteegee agaceeaegg eccaggttet
                                                                     1080
ccctgtgcag aatgaggcca gctccaatcc atcaggccac caccccctgc ccccgcagat
                                                                     1140
gctgagcgca gcctcacaca tcacacccat ccgcatgctg aattccgtgc acaagccaga
                                                                     1200
aagagggagc gcggacatga agctcctctc gtcttctgtg cactcacttt tgtctctaga
                                                                     1260
agaaaggaat aaaggatetg gaccaagaag cagcatgaaa gtggacaaga getttggcag
                                                                     1320
cgccatgatg gacgtgctgc ccgcgtccgc accccaccag cctgtgcagg tcctctctgg
                                                                     1380
gettteggag ageageteea tgteaceeae agteteettt ggteecegga ceaaagtegt
                                                                     1440
gcatgcatcc acgctggaca gggtgctgaa gacagcacag caaccggccc tggtcgtgga
                                                                     1500
gaccagcacg gctgccacgg ggacgcccag cacagtcctc cacgccgccc gtccgcccat
                                                                     1560
caaactgctg ctgtcgtcat ctgttcctgc tgattctgcc atttctgggc aaacttcctg
                                                                     1620
tectaataat gtgcaaataa gtgtgccccc tgcaataata aacccccgga ctgctctgta
                                                                     1680
cacagecaac accaaagttg cettttetge aatgageagt atgecagtgg geeecetgea
                                                                     1740
gggtggcttc tgtgcaaaca gcaacactgc ctctcccagc agccacccct ccacgtcctt
                                                                     1800
tgccaacatg gccacagatg cccagctgcc cagccccag ctccagcccg gcgctgtcct
                                                                     1860
ccgtccctga aagcagtttc tatagcagca gtggcggtgg cggctccaca ggaaacattc
                                                                     1920
ctgcctcgaa tecgaaccac caccaccacc accaccatca gcagcccccg gcacccccgc
                                                                     1980
agecegeece acceeegeda ggetgeattg tgtgeaegte etgtggetge ageggeaget
                                                                     2040
geggetegag tggeetgaet gteagetaeg ceaactaett ceageaceeg tteteeggte
                                                                     2100
egteegtgtt caectteece ttettgeeet teagteecat gtgeageage ggetaegtea
                                                                     2160
gegeceagea gtaeggegge ggeteeacet teceegtegt geaegeeeet taeaqeaqea
                                                                     2220
gegggaceee agaceetgte etgagtggge agtecaegtt tgeegtgeea eccatgeaga
                                                                     2280
acttcatggc agggacggca ggggtgtacc agacccaagg actggtgggc agtagcaatg
                                                                     2340
gttccagtca caaaaagagc gggaacctat cttgttacaa ctgcggggcc actggtcacc
                                                                     2400
```

```
gcgcccagga ctgcaaacag ccgtccatgg acttcaaccg gccaggtact tttaggttga
                                                                      2460
 aatacgcccc tccagcagaa agtctggact ccacagattg atatttttcc tctggcaaac
                                                                      2520
 cagaacgtta tttaagccat ggagacataa ggaaaattaa atacaaaact gagaaggtct
                                                                      2580
 agttgctgtt gagcttaatc tttttaatcc aaaggtgctt tacttttcct agactggata
                                                                      2640
gaaaatctag ccgtagaaag tgcatcaaac tcgatttatt gccaaaaccc tagattggag
                                                                      2700
 cttgggtgtc agaactcgcc tagtgggcat ctctgtggct ggtgagatcg gccacctcca
                                                                      2760
cttttggttg cagtgcagag acgccatgtc tecegaagag cattgccate actggccete
                                                                      2820
 ctaggeteae aegteaatte cagggeaget acaegtggte tgaategaga acegagettg
                                                                      2880
gagtteteca agtggagtte caecegeegg acteetgaca eecetggget agggaaaatg
                                                                      2940
 tegaettigt titgitetgi teetaaagig attageacta ateteiggga tittitaagga
                                                                      3000
 ttgcactaca gaagaatgta ccctgatgta aatctctgcg gttctgggag ccaaactcct
                                                                      3060
ctgagaacag tcagtgcaag agactccaat aatccatatt gaaagagtca gcaccagcag
                                                                      3120
aggetacteg acttaggacg caacagaggt tttagtattt cettecetee tecaageact
                                                                      3180
tgtagcagtt tcaggttttt aatttttttc tgcaaataaa tctaaactac gttattaaat
                                                                      3240
agaaatagtt tactcgca
                                                                      3258
```

```
<210> 3281
<211> 1300
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1296)...(222)
<223> similar to gi4519623 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3281
ttttttttt ttgccatttt caaaaaagat atagtagctt cagttgtaca ccaccagttg
                                                                       60
aaggggtttt catccaaatg agaaactcta ccccttgtct ctctagtgga acaggcacca
                                                                      120
gattcccaca agcagcagct cccatgtcct gtagcacgtg gcatccgacc ctggagtgaa
                                                                      180
gagtaagctg gcacagagcc ccgacgctgg gattcagact agatggcgtt tcgtggcgtg
                                                                      240
ccattgtgtg tcagegettt cagactggag gcactagtct ggtgaccaca gctcctgtga
                                                                      300
gaagtcacac ccacctcaaa aacctcatga atagcttttc ggaaacagtg gaagttgtag
                                                                      360
totattaaac cttttcttc aaagctttct toocttagaa tgcagaccag tgccaaaaat
                                                                      420
ttagtcacct cctttaaata aaggacagtt gtattattca gcttgataat tgccatagat
                                                                      480
tetttgteat aageaettee aetteeatet teetttaace catatataca agacacatea
                                                                     540
attacaacat cgatcatgtc acagcaaagt tcataagatt gcatatccac aggggaactg
                                                                      600
tctgttgcaa tgtagatttt gctgacaaca tcaaagagaa aagctttttc aatacctgaa
                                                                      660
tttgatataa agatatttaa taggttttcc aaggtcggca gttgtggaat gagtttctgc
                                                                      720
accaccttac taaaggcttc aaatattgaa tggtcataga tactagtcag ataaaagcta
                                                                      780
agatggagtt tttctagccc agcatctgca aggtcatcat tggccctttg atgaatgtcc
                                                                      840
ctctgtgttt ctattttgtg atcatcagac agaccatcaa ctttgtgaat aaaaacctca
                                                                      900
aaattcatgt ctgggttaac tttgtaggct ttagaaacag taatgtgaag tcttgttaaa
                                                                      960
gcctccatgt agtcatcctg tgcgtcaatg acgtatatca atgctcctgt tcccctgaag
                                                                     1020
atcatctcat agtcaaaggt tgggtcaaaa aagtccattt gcccaggaaa atcccatatc
                                                                     1080
tggaaattca caaaggagct attggaaatg tcatccttat aaatcttgtt ggtactttcc
                                                                     1140
aaaaagaggg tetegttggg tgacatetta tgaaacacca cettetggat ggaggaettg
                                                                    1200
ccgctgcgcc ggagtcccat gagcagaatc ctcggcttgg agctgtcagc gcccccgga
                                                                    1260
ccacagcete egectgeeeg gaegegtggg tegaceeggg
                                                                    1300
```

```
<210> 3282
<211> 3167
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3168)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3167) ... (2950)
<223> similar to gi299471 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3282
ggaattegeg agegeaggge geatgaetgg caggeagete cacetgeage cetggtgeeg
                                                                       60
gatccactag gtgaagccag ctgggctcct gagtctggtg gggacgtgga gagtctttat
                                                                      120
atctagetea gggattataa acacaccaat cagcaccetg tgtetagete aaggtttgtg
                                                                      180
agtgcaccaa tcgacactgt atctagctgc tctggtgggg ccttggagaa cctttatgcc
                                                                      240
tagctcaggg attgtaaata caccaatcag caccctgtgt ttagctcaag gtttgtgaat
                                                                      300
gcaccaatcg acactetgta tetagetgee etgatgggga egtggagaac etttgtatet
                                                                      360
ageteaggga ttggaaaege accaateage geeetgaega aacaggeeae teggetetae
                                                                      420
caatcagcag gatgtaggtg gggccagata agagaataaa agcgggctgc ccgagccagc
                                                                      480
attggcaacc cgctcgggtc cccttccaca ctgtggaagc tttgttcttt cgctctttgc
                                                                      540
aataaatett getaetgtte aetetttggg tecacaetge ttttatgage tataacaete
                                                                      600
accgcaaagg tetgcagett cacteetgaa gecagegaga ceacaageee actgggagga
                                                                      660
acgaacaact ccaggcgcgc aatgaacaac tccaggcgcg ccgccttaag agctgtaaca
                                                                      720
ctcaccgcga aggtctgcag tttcactcct aagccagcga gaccacgaac ccaccagaag
                                                                      780
gaagaaactc caaacacatc tgaacattag aaggaacaaa ctccagatgc gccaccttaa
                                                                      840
gagetgtaac acteacegeg agggteeaeg getteattet tgaagteagt gagagaceaa
                                                                      900
gaacccacca atteeggaca cattttggeg accatgaagg gaetttegee tattgecaag
                                                                      960
eggtgagaca ategetgage agtgagacea teacetattg eegageggtg agaceattge
                                                                     1020
ctategecaa geaaategag gecateaage tacagatggt ettacaaatg gaaceccaaa
                                                                     1080
tgagttcaac taacaacttc taccgaggac ccctggactg accagctggt cctggcactt
                                                                     1140
cccctggcct agagagttcc cctctgaagg acactacaac tgcaaagccc cttcttcgcc ,
                                                                     1200
cctatccage aggaagtage tagageagte ateggeeaaa tteccaacag cagttggggt
                                                                     1260
gtcctgttga ttgaggggtg acagcatgct ggcagtcctc acagccctca ctcgctcgct
                                                                     1320
cactctcggc acctcctctg cctgggctcc cactttggca gcacttgagg agcccttcag
                                                                     1380
ctctgtatct agctactctg atgggtcctt ggagaacctt tatgtctagc tcagggattg
                                                                     1440
taatacacca tcagcaccct gtgtctagct caggtttgtg aatgcaccaa tggacactct
                                                                     1500
gtatctagct actctggtgg ggccttggag aaccttgtgt caacactctg tatctaacta
                                                                     1560
acctggtggg gatgtggaga accttgtgtc tagctcaggg atgtaaacgc accaatcagt.
                                                                     1620
gecetgteaa accaetegge tetaceaate ageaggatgt gggtggggee agataagaga
                                                                     1680
ataaaagcag getgeeegag eeageagtgg caaceegete aggteeeett eeacactgtg
                                                                     1740
gaagetttgt tettttgete tttgcaataa atettgtaet geteaetett tgggteecca
                                                                     1800
ctgcttttat gagctgtaac actcactgcg aaggtctgca gcttcactcc tgagccagtg
                                                                     1860
aaaccatgaa cccaccagaa ggaagaaacg ctgaacacac ctgaacatca gaagaaacaa
                                                                     1920
```

```
actocagacy cyccacctta agagotygaa cacttaccyc aaggytocyt gycttcatto
                                                                     1980
ttgaagtcag tgagaccaag aaccccccaa ttccggatac aatatcgaca aaacatgcat
                                                                     2040
ctttgatgtc tgatagttac agagagaaga aattagttcc tgtggtttac ccccattcta
                                                                     2100
gcactccctc cttccagtaa ttcctggaag gagggagtgc accaatcgac actctgtatc
                                                                     2160
tatctactct ggtggggcct tggagaacct ttatgtctag ctcagggatt gtaaatgcac
                                                                     2220
caattggcac totgtatota gotcaaggtt tgtaaacaca ccaatcagca cootgtgtot
                                                                     2280
ageteagggt ttgtgaatge accaattgae actetgtate tagetgetet ggtggggeet
                                                                     2340
tggagaacct ttatgtcgac actctgtatc tagctaatct ggaggggatg tggagaaact
                                                                     2400
ttgtgtctag ctcagggatt gtaaacgcac caatcagcgc cctgtcaaaa caggccactc
                                                                     2460
agetetacea ateageagga tgtgggtggg geeagataag agaataaaag eaggetgeee
                                                                     2520
caaccagcat tggcaacccc gctcgggtcc ccttgcacac tgtggaagct ttgttctttc
                                                                     2580
gctctttgca ataaatcttg caactgctca ctctttgggt ccacgctgct tttatgagct
                                                                     2640
gtaacactca cegegaagat etgeagette aeteetgage eeagegagae catgageeea
                                                                     2700
ccggcaggaa cgaacaactc cagacacgct gccttaagag ctgtaacact ccccgtgaag
                                                                     2760
gtctgcagct tcactcctga gccagcgaga tcacgaaccc accagaagga agaaactccg
                                                                     2820
aacacatccg aacatcagaa ggaacaaact ccggaggcgc caccttaaaa gctgtagcac
                                                                     2880
tcactgcgag ggtccgcggc ttcattcttg aagtcagtga gaccaagaac ccaccaattc
                                                                     2940
cggacacaaa accctgtctc tactaaaaaa tacaaaaaaa ttagcgcggt ggggtggccg
                                                                     3000
gcgcctgtag tccggctact cangaggctg aggcaggaga atggcgggaa cccgggaggc
                                                                     3060
ggagettgea gtgagecaag atggeaceae tgeactecag cetggtggae agagtgaeat
                                                                     3120
tctgtctcan aaaaaaaaag aaaaaaaccc attggttaaa aacaaaa
                                                                     3167
```

```
<400> 3283
ggcaccactg cactcctacc tggatgacag agtgagaccc tgtctccaaa agaaaataaa
                                                                       60
agtaaagatt caccaagagg ctacctggct acataatcgt aatgactcta ctgctcaaac
                                                                      120
catctggggc tccatcagtg gatacctaca aagtatgaca tggtttttac ctttcttcgg
                                                                      180
accctaagtg gtcatttaat tgctattact tttggcgtat tgtgttttta accttttggt
                                                                      240
gaaagtttgt gtctttcagg tttcaatagc tccaagtcaa gctaatgatg gcccaagaat
                                                                      300
tecaacecat aacateccag ggageacece agteeetaca gggtetttag ggacaqeeaq
                                                                      360
tgaggagatt tcccccaccc ccctaaaagt tagggcaggg gacggacatc ccctgtttca
                                                                      420
ggcagggaag ttcggtttca ggaaggttga ggtctttcag cccttttctc cttaagaaat
                                                                      480
agagggtgaa atctcctcag ggggaaatag agataggaac aggaaatggg atgggggttg
                                                                      540
cttctttcat gattacttta accaatgeet tettaettta aagttetagg aactggeett
                                                                      600
aggaaatcta actatgaaac caaggttatg gagtatccca cctcaggaag gaacactgaa
                                                                      660
```

```
caactgattg acagtettet tgeegeeage cagaceacea agtggeecat taaceaagag 720
aaccagegea accagataeg etgaeeegea teteetaeet eteatgtget ttgeecagee 780
cageetgeat acettaetea tgatgteaat teecaagttt egetaataaa aacatetetg 840
caageetett cagggageee neennaaaaa aaaaa 875
```

```
<210> 3284
<211> 2202
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(1707)
<223> similar to gi5441764 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3284 tcaaaatgaa aattcagtgg acaagtgggg aaaaccttta gtgattgata aactcaagga 60 aatggccaaa gtcgagggtc tctggaactt gtttttgcca gctgtcagcg gactcagcca 120 cgtggactat gccttgattg ctgaagaaac aggaaaatgc ttttttgctc cagatgtctt 180. taactgccaa gcaccagaca cagggaatat ggaggttctg cacctgtatg gaagtgagga 240 acagaagaaa cagtggcttg agcctcttct tcaagggaac attacctctt gcttctgtat 300 gacagaacct gatgtagctt caagtgatgc cacgaatatt gaatgcagca tccaacgaga 360 tgaagatagc tatgtaatta acggcaaaaa atggtggagc agtggagctg ggaatcccaa 420 gtgcaaaatt gcaattgttt tgggaagaac tcaaaatact tctctctcca ggtaattaaa 480 caattetgat tgagaaacet gtgtaggaat gagecagtet teeteetate taggtaattt 540 acttaaaatt cactgtttgg actcacaaat cataatgtaa gatatgagag taaatgtcat 600 atatttgtat ttcacaagta ttttctaaca ggtgtttttg gaaaacatta taqqqaqtat 660, tgctgaacat tcttcgctgt ggaattttca gtattagaaa gtgttgctaa attatcaaag 720 ctgtttggat taaattatca gacaaatttt ttcagacctg tgtaatgaag tgattagatg 780 tttagatcaa aggcaataat cttgaaatgt ttaattatat atataagttc ccagttacca 840 ttgttgagca gtgagaagct tcaatcaaac aactcattta ttttcaaatc attgtttctg 900 ttccagatca cagcctgcat cagactatgt tggtgtacgt cttttacaca gttcccattc 960 cagtcatcac tgcttacatg actacatgaa aacatcaaaa agacaattgg gattctgctt 1020 attatetgtt ttatttttet tettageaaa etttttetaa tacaattttt ettttgaeta 1080 gacacaaaca gcacagcatg attettgtte ceatgaacae acetggagta aaaataataa 1140 ggcctttgtc agtttttggc tacacagata attttcatgg aggacatttt gagatccatt 1200 ttaatcaagt gcgagttcct gccacaaatc taatactagg tgaaggtagg ggatttgaaa 1260 tttcccaagg ccgccttgga cctggcagaa tccaccactg tatgagaaca gtaggtttgg-1320 cggaacgcgc tttgcagatc atgtgtgagc gggcaacaca aaggatagct ttcaagaaga 1380 agttgtatgc acatgaggtt gtggctcact ggattgctga aagccgcatt gccattgaga 1440 agatecgett gttgactetg aaagetgete acageatgga caetetggge agtgetggeg 1500 ctaagaaaga gattgcaatg atcaaagtgg ctgccccacg ggctgtcagc aaaatcgttg 1560 actgggccat ccaggtgtgc ggaggtgctg gtgtttccca ggattaccct ctqqctaaca 1620 tgtatgctat aacccgagtt ttgcgtttag cagatggacc, tgacgaagtt catctttcag 1680 caatcgcaac aatggagctg cgggaccaag ccaaaagact gacagccaag atataaggag 1740 ggtggcactg ccacatccca ctggcagaaa ctctccttta tacaaacttc attggctcca 1800 acatttgaat ctcatatttt tgtagcagtt tgagcacagg gttaattatt catttgtggt 1860 aaagattata gcatctattt tgatcagtgg gttttattat ttcaagggtc acacagggtt 1920 aagttcagta agaaatgctg tagctgttgt cattcaatct agtgcctcct tgaggccagg 1980

```
agttcaggac cagcctgggc aacatagcga gaccccatt gctacaaaaa atttaaaaat 2040 gaaacaagtg tggtggcaca tgcttgtagt cctagctact tgggaggctg aggcaggagg 2100 attgcttgag tctaggagtt tgaggttaca gtaagctgtg atcgtgacat ggcctccagc 2160 ctgggtgacc gagtgagact gtttctaaaa ataaaaaaaa aa 2202
```

```
<210> 3285
<211> 2725
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2525)...(1487)
<223> similar to gi4127947 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3285 agccaccagg caagaaacct tcagggtgat tatgtgtgtg cttttttttt ttttaatagt 60 atcattcatt tgtacagaga aatcatttgg atggatctat ttacagtctt ttctgattat 120 catttccact ggccaaatat atttcacaga atagtcaaca ctgacttgaa ttgatcacca : 180 ttataatcgg gcttttactc ctcctcccc ctttcaaaga tgatgatccc attttaacag 240 aaacattttg taataaaaga ttcaccagtc tttttccatc ttatgactaa atccaccaaa 300 atttatttaa tatggtcaaa tttttaacac atttcattgt ttcttttcaa actcattatt 360 tgcaggtatt gcaaaccaag gcaaataagt ccacggtccc ctcgagcctt ctacaactta 420 ctgacacgcc ctcaagttga ggcttctcct atctcctttc acacttgtga aatgtctggc 480 acaaccagac attttacttg aagacaaaac tactctcttt tcctctctt ttcttttaac 540 teactaceaa teacetteee tettgeattt cagacaacae taaaacttte aacaaaatet . 600 ttgaagtggt tttctttcag tagtctagaa tacatcaagc catttcatgg gtctttaccc 660 tgaaatgeta caetttaaaa atggeaattt ttitaattgg etcaaaaaca gtatggettg 720 gtttcacttg gtaaaattaa tgtgatttaa aaaaatatat atatatacac acacacac 780 acatacacac acatttttaa tcaggaagaa aaatacttta aagacatgcc aatttgaaaa 840 ggcatcaaag taaaaaaata aaagcaaatg ctaaaaacta ctttacaata aaaaaattaa 900 ataatcggca ggttaaatga atgtaaaatg aggaatgtac agtgaaaaac aaactaatat 960 aaagcattcc agttgataaa aacctcctca ggcttatggt ttgttttcca aggaaattat 1020 gtttcaatgt aaagtttgaa atactccaga catacattcc atgtaggttt tgggtgccaa 1080 tgttaaaatt tcaaattttg catgcaaggc ttagcaaaga aacactggca gaattccagc 1140 atttgcaaaa ttctaagttt tggtgaatat tgtaaatatt acaattggta ttagaaagcc 1200 atgatgaatc cagaattaag agaaaaccca tttcataaat attttgtttg attaaaaaat 1260 accaggetta ccatgtttta aataatteaa gaaaatatet ttaaaaaaaa aaggaetgea 1320 atttaacagt aatctgtata tctttagctg ccattaaaaa aagaaaaaag aacaaccaaa 1380 aacaatgaaa atgttacaac tggtataaag taaccctatg atgctcccct tacgagaaaa 1440 caaaactgta cacatttata aacaaacagt ctctcccatc agttaacaca cagagccttc 1500 tetacaccaa agtetettte egtttgecac cagaaaggge tittgteeete getettegga 1560 tgccgggctg tgtctggtgt gtctttaagc tcttgctgtc ctctgccatc tgcatgccag 1620 agccacatct gtaagcgttt tcatcaactt ctacctgagt aacactggaa actgtggatg 1680 coctcototg ggotgtgagt ttcctcgcag aggggtggtt cccctcacac tcttcgtgca 1740 gctccggcag gccctgcagc tcaggtggac tgcctgccga ctggaagggg gcaatggccg 1800 ctcgaataca gttgaaccac tgctgcttgt ggaacacgtc attggcttgc agagtgtgag 1860 actaggctgg agaggggtca tggaagcgaa ttctaaagat atttttagct ttctctgagt 1920 tactgaaage teetegaaag gageeteeca tteteacate teeateetge aggtetteta 1980

```
ggactagete tiggactggg attggetgee ggtaaacetq gtaagagtge egitegitee
                                                                     2040
gtgtgacggg ccgagtcaga accaagatgt cttgaaacag gaaaatgtaa agtttatgtc
                                                                     2100
cactettget eegeagetee ceatggeaca geageacttt getegetteg attetggggt
                                                                    2160
ccctctgctt ttcatccagg tactccagct tgtcqatgta atactggcac tcggattcac
                                                                     2220
ctttcttcaa gttgatatca gagaggactc cctgtattat caatatagca tcctccagaa
                                                                     2280
gctgaacatc agggtgctct tttggagtgt gtttaagaat ttcttttaac agtaaagggt
                                                                    2340
atttgactag gcgacttcga gggatatcta ggaaactcca aagatctagt tttcgactga
                                                                     2400
agggagactc gagacatcgc tggaggaagt cttggactct tggatcctgt ttcttttgat
                                                                     2460
caagaagagc tttggctgcc agctggttac tacagtaacc tctgtaggca ttcaagcgcg
                                                                     2520
gtaactgaag agtaataaaa gaaaaggtat gatgtgttcc tgttatgacc gagtgcatta
                                                                     2580
acaagcctgc aaacatgaaa cacaaaatgt acagctattc ttgagagttt taacaagctg
                                                                    2640
tggacatttt ctggcagata ataatggaag ctgaatagca ttttagcaat catcaaaatg
                                                                    2700
ctcttcaaat tttcataatt tggct
                                                                    2725
```

```
<210> 3286
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(347)
<223> similar to gil619929 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3286
aaagatgaat acataagtaa atcacattcc tatatattag caatgaacaa gtagaatttg 60
aaatgaaaac acaacacct tacatcaaca cccccaaaaa tgaaatactc aggtataagt 120
ctaacaaaac atgtacaaga tctatgtgag gaaaactgca aaactctgaa agaaataaaa 180
gaggaactat aaatgcatga agagatattt catgttcaca gataggaacc ctccatgttg 240
tcaagatacc agttcttcc aacttgatct ataggtccaa agcagtgcca atcaaaaicc 300
cagcaaataa ctctggatat tgacaaactg actctaaagt ttatagatag aggcaaagac 360
cccgaatagc caatacaata ttgag
385
```

```
<210> 3287
<211> 2744
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2745)...(499)
<223> similar to gi2565046 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>						
					atcaatataa	60
					aatctttaac	120
					gtttgaagtc	180
	tttgtgaaaa					240
					attaaaattg	300
caccatcttt	aaaagggtgc	cggtatattt	attatatcct	gtccttcccc	gcttcacagt	360
ctggatcccc	caggaaaggc	agctgggaaa	accagagcct	gtgaagggaa	gcgcagcagc	420
					gcacggcagc	480
ctagacgccc	atagttaaac	cttatatgat	tcatagtcca	gcgtttgagt	gagcacttca	540
gtcagaacga	aactctgcat	tgtgaacatc	tatgccctct	ggcaaaatat	tcttcggata	600
aaatgaaggt	cattttccac	aggataatta	aaattatttc	ccgaacaaac	tcgaagttcc	660
tgcttgtgct	cccatgagct	tccggaaaga	tggctgcctt	ggataacacc	tttcctcctg	720
cacactctac	gattgccttc	atagtggaaa	gacttgggca	gattcccagg	tgtgatgtaa	780
					ttccaagctg	840
					atcaatgaac	900
ttctgacacc	tgaagcattc	ttccagccac	tctggcgtca	ctatgtgctt	cacgacagaa	960
atcgcccgcc	aggaacttcä	cggtgcgagt	cactttgctg	gcaataaggt	gtgtgcactt	1020
ctgtgcagac	tccgcaacct	ctccaccaag	aatgtagagc	ttcttaaata	tactgttgaa	1080
cctggacagg	ctcgaatcca	gtgaaaagca	caaaaagggg	tcaattcttg	gagttagctt	1140
tttagtggga	ggtggtacgg	tcttcaattc	tggctctttt	ggaagaaagg	ctggacatta	1200
gctacttcat	tctgtttcag	tttgggaggt	agtcttatac	tcatcaacaa	ctctgcagac	1260
acttttaagg	gaactctcca	agcatctaaa	agatttaaaa	ctaaatgctg	ggtaggggca	1320
aatggatcct	gcagactgaa	tgccgtgtag	cgactatact	gaatctgcct	cagtgcctca	1380
aagtttccca	gaagaatgtc	gccaagccac	tgggcgttga	cacagggtat	cctccactct	1440
ttggcttttt	catactttaa	accagttggt	tctttacaga	tgaggactgt	gttgctgcgg	1500
catagataac	ccgtatattt	ggcacctgcc	aaataagcca	ttaattttag	gtcatctctg	1560
tcactatcaa	caaatccagt	cacagaaata	atatgctgtg	aacatggctt	tcctcctggt	1620
gggaaggcca	ctgggaagtg	aagggctcgg	tgcggcggta	ccattttctt	cttctttaag.	1680
actgtgttta	accagtgtgc	agtaacacat	ctctttcttt	ctcttattgc	ctgtgcatac	1740
	cttgactctc					1800
acagtgccgc	catgtgcctg	gattatcctt	ttccaggtgg	ccagcagttg	cttatcagac	1860
atctgctctg	gataatccgc	aattgcaaac	acacatccca	ataagaagcc	ttcttctgga	1920
atctccactg	ctggatcatg	tccaaaaagc	tgatgctgct	gaggcgatgg	tggtggctgc	1980
tgttgctgct	gctgctgctg	tgaaaatgga	tgcggcggct	gctgggggta	aggttgctga	2040
gagatctgct	gctgctgctg	ctgctggagc	tgcattatct	gctggggctg	aaggtgtaaa	2100
accgggtgct	gctgctgctg	ctgctgggcc	tgctgctgct	gctgtagcat	gtgtgtctct	2160
ggagtcactt	tcacttggct	aaacagcact	gcattggcat	ttgtatgtcc	ctgctggctg	2220
tgattcacct	gctgttctaa	atttttcgta	ggtgctgaaa	gagtctgtaa	gatatgtgct	2280
acatttgatg	gccggttcat	ctgctgaatg	tcagcattat	tagtaatatt	cctcagtgtc	2340
cgtacagctg	gactccaggt	agctatcatt	tctgatcttt	cagaactttg	gaggttttgt	2400
ccagcagcca	ttaaattacc	ccggacctca	gggggcaaaa	tgttacctgg	gacgggtggg	2460
acattggcac	acaagttaat	caacccaggc	tcctttccct	gaggcagcct	gcgttttgct	2520
gcagctaact	gtgggacttc	ggccggggtc	cagtttaaat	ttctctcctg	tttttccggt	2580
gatgaatctg	aagaatcatc	aaacattaat	tcccctttag	atttttcagt	gttggattta	2640
ggagaaaact	gctggtcacc	tgaaggagac	ccttcttgag	agctggcagg	gcttgacttc	2700
tcatctgtac	taccctcatt	ctgagaatct	tgttcctcat	tttc		2744
			,		•	-

<210> 3288

<211> 1624

<212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1625)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (63)...(1286)
<223> similar to gi3766257 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
gagaatgtct tgccacccaa tgtaacaaac acctctgaat ttttttttgt ttttgacagt
                                                                       60
tttttgtctc acctaatctg gccacctttg ttttgagcgt ggtgcctcca gtgtcaatca
                                                                      120
ttgctgtaat ttatgggcga tatctacgga aactgaccaa agtcactcag gattccctgg
                                                                      180
cacaagccac tcagctagct gaggaacgta ttggaaatgt aagaactgtt cgagcttttg
                                                                      240
ggaaagaaat gactgaaatc gagaaatatg ccagcaaagt ggaccatgta atgcagttag
                                                                      300
caaggaaaga ggcattcgcc cgggctggtt tctttggagc aactgggctc tccggaaacc
                                                                      360
tgatcgtgct ttctgtcctg tacaaaggag ggctgctgat gggcagtgcc cacatgaccg
                                                                     420
tgggtgaact ctcttccttc ctaatgtatg ctttctgggt tggaataagc attggaggtc
                                                                      480
tgagctcttt ctactcggag ctgatgaaag gactgggtgc aggggggcgc ctctgggagc
                                                                      540
tcctggagag agagcccaag ctgcctttta acgagggggt catcttaaat gagaaaagct
                                                                      600
tccagggtgc tttggagttt aagaacgtgc attttgccta tccagctcqc ccaqaqqtqc
                                                                      660
ccatatttca ggatttcagc ctttccattc cgtcaggatc tgtcacggca ctggttggcc
                                                                      720
caagtggttc tggcaaatca acagtgcttt cactcctgct gaggttgtac gaccctgctt
                                                                      780
ctggaactat tagtettgat ggeeatgaea teegteaget aaacceagtg tggetgagat
                                                                      840
ccaaaattgg gacagtgagt caggaaccca ttttgttttc ttgctctatt gctgagaaca
                                                                      900
ttgcttatgg tgctgatgac cettectetg tgaccgetga ggaaatccag agagtggetg
                                                                      960.
aagtggccaa tgcagtggcc ttcatccgga atttccccca agggttcaac actgtggttg
                                                                     1020
gagaaaaggg tgttctcctc tcaggtgggc agaaacagcg gattgcgatt gcccgtgctc
                                                                     1080
tgctaaagaa tcccaaaatt cttctcctag atgaagcaac cagtgcgctg gatgccgaaa
                                                                     1140
atgägtacet tgttcaagaa getetägate gaetgatgga tggaagaaeg gtgttagttt
                                                                     1200
attgcccatc ggtctgttcc acccattaag aatgcctaat atggttgcct gtccttgacc
                                                                     1260
caaggaaaaa ttacctgaat agggaaaacc atgaagagcc tgcctttcaa aacccaaatg
                                                                     1320
ggatatacca gaaaacctaa tgaacaaaca aagttttatt tcagcataag gaagcaatta
                                                                     1380
ctggtaaaca atatgagact ttaatgcaaa acagtgttgc agaaaaaaaa ctcaqaqact
                                                                     1440
atgaaataca taaaccgata tatcaagtta tttgaaaaat acctattttt ttccaaagtg
                                                                     1500
tgtaaaagat tgttttgaaa cgtacctgtt ctcaagatct ttttattcag agttttaata
                                                                     1560
attgtaactt tttaaatgtc tatagcactg aagttatttt caggttttgt attntctttt
                                                                     1620
cttg
                                                                     1624
```

```
<210> 3289
<211> 4747
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<400> 3288

```
<400> 3289
 ttttttttt ttgaattaat tgatgaggtt tatttgattg tctttcttat aaaatacatt
                                                                        60
 aaaaatactg cttttaactg taggcacaca attaaaacaa atgtaaacct atgtttaatt
                                                                       120
 taaaatatat taaaaatgatt taataaaggt cttttattat tttacacatc aaatttcatg
                                                                       180
caatcagtac tccactgaag gagaaaagga ttatgaaaaa acaatgaaag cacagggtag
                                                                       240
gaaaataaac aacacaaaag actaattetg gatttttttt etgtgteett aataccetgt
                                                                       300
gctgtctttg acaacaaaga tgccttactt atgtgattca gaggcccgga agtgaaaaaa
                                                                       360
atacaagtag ttaatgaata atgcatatgt tcatagcaat ggtcaaatta tactgtttcc
                                                                       420
taatggatac catttttctt tatcgagtgg gacactacag agtcggatgt taattgctcc
                                                                       480
cacaaataca gttttactct tcacaataag cattaagaca tgtccttgga gctctgtgac
                                                                       540
ttcatcatat actacaattt cattgtaagt ggggtccgta cattttggaa cagattttgt
                                                                       600
tttcctccta cgaacttcac tgggatatgg taaaagataa aattcaacat gtgcactggg
                                                                       660
cgcagagcca tctgggagat gaatgttttt catgtgtttc actagtatgg tcagcttcac
                                                                       720
atcotegtag gatatgacta actgeacett aggettettg tetggaaact teteacetag
                                                                       780
gtacacaggt gatgattett caactgtttg ttgcccagcc tcagagagga aaaagctaag
                                                                       840
tacacaatca ctgtttgtaa cttcatgtga tacatttaat atctgttcca tgtaatgatt
                                                                      900
tagatetetg aatettetgt gatetgaatt tgtaaaaggt aggtgeeace aatgaggaaa
                                                                       960
ctctgggaga gtcagtgatg caaactgctt ctgaagttgg ctgtgaagtt ttgaaaactg
                                                                      1020
ctcaaatgat ttttctgtca ggcttgtttc gttgttgctg tgtgtcacct ggatcagata
                                                                      1080
cagattactg gatttcttgc tgaaccctaa aattgttgct ctttcaatcg acctagttgt
                                                                      1140
actcagcaaa caggatteet gaggaaaagt etgtgaagta gatttggeag ggettatgge
                                                                      1200
tgacatttgt gcaagtgtgt ggatcaagtt attcaattta acagggaaac actccaqact
                                                                      1260
ttcctttatt ttcttggtaa aatgacttgt tgcttccagg tctgtgtctt gtggacgaag
                                                                      1320
attattatac acatatttca ggtcttgaaa tcccacttag ctcaggcagt ccctgcatac
                                                                      1380
agcatcattt cccagcaggt tccaagagca gttggctgtg ctttctgata atattataag
                                                                      1440
cacgacagca aagttcccac aaaatcttga aaatgctgtg ggtttttccc caccctctgt
                                                                      1500
aataaagtat teccatetet gaagtaaaaa tgaaaggage teggteeett tttateeete
                                                                      1560
caaatgtttg tgcatgacct aagaattttc caaagtcaat atgaaacatg tggcccgact
                                                                      1620
ttgtcagcat gatattatca ttgtgacggt cacatactcc caqqatqaat qttaccacac
                                                                      1680
accagecage acaggagtag aaaaagttee teaaggeett tteataatet geetttaagt
                                                                     1740
ggttgtgctg actgaaccac tttttaatgg tattttcttt caatggtcct atcagtccag
                                                                     1800
aatggcgatg aatctttgct agggtcacag catcaggtac catctqcacc aatcqttqqt
                                                                     1860
cttttcctgt ggatagacat ctataaatga tcatttgcat atccaagect tcctgcagec
                                                                     1920
aaatattgtc catcacttga ataagctgca gaacaagcat atcctgacga agatcatctc
                                                                     1980
cagcettaaa aataatgetg atgtttttge ceateagatt ageattgatg aaagtaatet
                                                                     2040
tcaatggcaa agcattagat gtaaaatatg aacatgcatc gtgatcaatc ccttttatac
                                                                     2100
atagggcagg gttcagagga agatgacaag tatttacatc ttgaaagaac tcttctagtc
                                                                     2160
tgccaatttc tttcttcagt acctcctgtc tttgatggtc actggcagac ttgactcttt
                                                                     2220
ccccaatatc tcccagaatt ttgataagtt tctgctcctt ggaaaactca tcattcaagg
                                                                     2280
ctttacctgc acagaattgg agagcagcta gtagcttctg ataccagctt ttaaaataag
                                                                     2340
cttcattttc tgcatttttt agcagccagt aaagacgatg ggcaacctgg atgctctgca
                                                                     2400
aggagcggtg gagtagaagt tgcactaaag gactctcaag gttccattca aacttgacag
                                                                     2460
cctgaactag ctgtgggaga tattccagta gttcatcatt caagaggttg tctaattgtt
                                                                     2520
gaactgccac tttacgaatt tettgatetg gaaaactgga agtcaaaagc ccaagagcct
                                                                     2580
ctaaaggttg agaaaatgtc catcttctca aaatggtatg catttctgaa acagtccttt
                                                                     2640
catcccatcc aggggcacta cccaggacta aaggaaggga gcagttttca ttattgcagt
                                                                     2700
agaagcgata aaaccataaa tatcttttct tttcttcaga gagtagtagg ggagtctgtt
                                                                     2760
tctgtgaaag tctggcaata tgttttatac actcctttag tggctcttca agattacttc
                                                                     2820
tattetette agaateaggt ticatataet eccaeceagt agetggaaaa teaatetgea
                                                                     2880
gggtcaccgg ggatggctga cttacatccc acactcctgg agttatcatt tctacgggag
                                                                     2940
```

```
gctcactctg taatgtcatg ctgaacagca tagacccgag aatggatttt tcttttggaa
                                                                     3000
acagtggaag acaagtccac gccagtaaat ttgcattgtt ggttgcacag gcaatcccaa
                                                                     3060
acagttttac agtgagcatg gattcccttg gaagtgactt tatttcaagg ggaaaattga
                                                                     3120
tectgtgeac ccaggtttet ggaatgttgt gtgetgeata caetgtgaag etgaggtggg
                                                                     3180
aaggaagccc gggatttaga taggaagtgc atctaggtac atttacaggc tgaaaatctg
                                                                     3240
cataaaagct gttacagtag acattgatta gctggtagat ggatgtggat agttcagttg
                                                                     3300
ttaccttctc tatcaagcct tttgctgaag tctctgaact ttgataaaaa ttctctcctt
                                                                     3360
ttctctgaag aattagactt agttcattta ctgcatctgt aatttgtttg gtttccacac
                                                                     3420
accetagaae actgeatatt tttttaaett etteaataat attataeaeg tttteetggg
                                                                     3480
ttttcaatag gtatttcagg tggaagtcat attttctgat gagtgttaag agacattgtc
                                                                     3540
tggatacttt ccaaatatgc ataaattcta gaagttgatt cagataaaac tgactgtggt
                                                                     3600
cctcttcatg ctttcgagat agctttcctg gagcttccct acttttctqc aqqtqqaqct
                                                                     3660
gaataacaga tttatctttt tgaaacattt tgtggctccc caaacagtgg tcgttttgta
                                                                     3720
aaaattotto agagooccat acaottagaa tatgatottt ggggagtago tggtoatttg
                                                                     3780
tgcaaaaatg cagaatttct gcaattagat ctttgacaag ataattagca catggcataa
                                                                     3840
aatgaagagg ttgtgttgag ttatcaataa aaatatgtat attaaacttg gtcttagaaa
                                                                     3900
agagetgata eggaaatget gtagtagtge tecagatett eecagaattg aaattaacat
                                                                     3960
cagctgcatg atatctttct ctgatttttt ttactttgtt gcaaaaagag gccagactcg
                                                                     4020
tattgctgct ttgaggtact tccactagct gaatggaaca acctattgac tctatattct
                                                                     4080
tetgecatgt aettteecae atteegggtt gaagagagee.ttteaaaage atcaaagatg
                                                                     4140
gttccacaat gttcacatgt ccactecttt tattetette tttcggcatg aagtcacttg
                                                                     4200
agaaggatga atttgttgga ggaatgctac tttcaaatcc tatatggtag ttatgatttt
                                                                     4260
cattttetaa ttetttetet agattaattt tateeaaaet tgtgaatgat ggagetaaaa
                                                                     4320
tactgaatct ggaatcatca gcaccatgat gttttcctat ggggcttccc caggagcatt
                                                                     4380
ctttattcgt attttgaggt tttggtaaca cagaaggact aaaaccaatt gctggtgctt
                                                                     4440
tgctaacttg atgccaggag agttcacggc ttttagaagt gaattcattc aaggatattt
                                                                     4500
ggtgtgcttc atttaatgaa tgccctgttg agtcccattt tggtgcagtg ggcacaaaaa
                                                                     4560
aggigittic atcaatitca etetegiagi giggaatitt gecaetqate teatetaeta
                                                                     4620
totgatoaaa accoagactg acttggctag aagaatgggg ttgatttaca aagagaaatt
                                                                     4680
cttggtgttc atactgcttt tcgtgtgatt cattaggatt tggatccgtt tgccaagaat
                                                                     4740
atgccat
                                                                     4747
```

```
<210> 3290
<211> 2817
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2818)...(1352)
<223> similar to gi4309889 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3290
aaatgttcca gctgatgatg tgtctggaaa taaacatgaa actatttata caatactaaa 60
tcaggacgcc cagaacaaga gtcccagcgc ggtcatgagc cacgaatcgg atgctgctca ctctgacagt gccaggtcat cttccagcaa gttagaactc tcgcctgatg ttaacaaaat 180
aaggaaatca gagcccaaga tcaagaagtc tgtaagtcat gaaagagtct ccaaaatgaa 240
tttttaattg actggaaaag ggatcacctt tttctcatct gagagcaaga aatatgagag acccaaggat gatcgagag aagagttcaa cacgtgggtc aataatatgt acgtcttctt 360
```

```
tgtgaacacg ctctttcatg cgtataaacg tgaagaagct atcaaggaga aaataagggc
                                                                      420
agacaggtta cgtagcacag cacaggccca gcagcggaag atggaagatg acgaactgga
                                                                      480
agcaaggctg gacatcttta tcttgagaga ggaagaggcc aagagacatg actatgaggt
                                                                      540
ggacatcaca gtgctcaagg agccggcaga cgtgtcatcc tctcacctca tactggaccc
                                                                      600
tcccaaggag gatgtgaccg tgtccccatc cagcaagacc atcaccagca agaagaagaa
                                                                      660
aaagtagaga gacacgagga cacacacaca ggcttaggat ggcacgtgct gtaagatttc
                                                                      720
ctgagcatta cagttettag cactgaacte gteacagtgt tttaacatae ceettggeee
                                                                      780
actgcatctc aggtttccta catggctgga ttacgggagt tcgagaccag cctgggcaac
                                                                      840
atagtgagac ccccccatct ctgcaaaatt aaaacatcag ccgaccgtgg tggtgtgtac
                                                                      900
atgtggttct agettettgg gaggetgagg tgggaggatt gettgagete aggaggttga
                                                                      960
ggctgcagtg agccattgca ttccagcctg ggtcacggag ctggtggcca gtgtaatcta
                                                                     1020
taaataggca gcaggagaga gactcaacac caaaccagaa ttttaaaaac ttttaacaat
                                                                     1080
ttattagtct tattttccag taaaatattc acagagatgt caaaagaatg agatggtgag
                                                                     1140
cgatatagcc aactaccttt aattaattcc acataaatag ttaagatcta aaaacctcag
                                                                     1200
atgagcagac cgagtcgaaa tgtgattctt caaagcaagt attgctttac ccttgtcctg
                                                                     1260
aatgcagtct gtcatatgac cactaatttg catgtgacca aatggttgca gagtgttttt
                                                                     1320
tagatatget eteggtgage egteateegt caatecaaga agaagatgtt gttgaactge
                                                                     1380
gttgcacaaa gtttcttgac ctcttcattt acttcaatca ggtttgcatt tttttgattc
                                                                     1440
aaaataacat agageteeeg eegateagae ttettteeaa caacceagta atcacteatg
                                                                     1500
gccttcacaa tgatctcctc atcttcatcc actctggtaa agtcactgtt gatgtcaccg
                                                                     1560
agaatettea ttaaateegg gtgeaeggaa gtgagegaca egetgggegt ttteeteatg
                                                                     1620
tgaactgtgc tcttctcggc gagattcatg tggttgaagt agataaactt aaactggggt
                                                                     1680
teettteete agaeeeegga acateeeeet tgttgatgtt aaaaetgtte cacaagatgt
                                                                     1740
ccagaggccc agccactgtg aagctggggc cccaacgatg ctgtcccagt ccttcggcaa
                                                                     1800
aaaacccaac gttgggtgga cagaggcgtc gatcataaag cacacagccg cactcatggc
                                                                     1860
cttataaacg gattaaatgg agctcttcat aagtgtcatc tgtatttaca aaaattttgg
                                                                     1920
ggaatctgca ttttgcatct ggatcattga ggttcaaggg tccggtaaga aatcttccat
                                                                     1980
agtgttgaag atttcctggc atttctgctc ttattggaga atcccttcct gctaactcag
                                                                     2040
gttcggatgt gccttgggaa aagggaggtg gtaaggtatt tgtataaaat tctcatgtca
                                                                     2100
tettgtteta atecaeteca gatgagetga tegttataga gaaaageagt gtatttgaet
                                                                     2160
atattcaggc tttcctccat tcgtattaat aaaggactgg attttcaaat aagtcatttt
                                                                     2220
atccaacggg aagaagctga ttccaccaaa aatgtcaagt aggtcacatg actgcaaatg
                                                                     2280
tagegtttge aaatacegat ggaagaattt etetaatett tettteagaa gettgaegee
                                                                     2340
teegtettee atggetttea gaaatgtace attaaaaage ttgtacatge tgtageactg
                                                                     2400
ccgcagcacc gagctataaa ccttgtccaa caactcctcc tcttgatatt caataactgg
                                                                     2460
ttttccatct ttactctgtt tttcaattat aggattccga acaaccatga ccatccagaa
                                                                     2520
attttcttct ggttcattga agaactgtct gttcttctgt gtatgtaaag attttgcagg
                                                                     2580
ttttgatggg ctaaatgtcc ttgtaaactg tacaatagct tcacacaatc cgacatttct
                                                                     2640
aatcttctca ttcttttcta cctcatttgg atgataaaat aaaatcttat tttcctcctg
                                                                     2700
teettegege ggeeegaage gegggttgta gatgaagaaa eteageageg eeggegggaa
                                                                     2760
etgettetee tgggeegeed agggeeeget eeeggeeeg geegeegetg eagecat
                                                                     2817
```

```
<210> 3291
<211> 446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(274)

<223> similar to gi558846 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3291
aagttaaaat gatattagga aaaagctcag attagatata aaattgatca tgtctgccag
                                                                      60
aaaatattet eetaaaagea atttetetet aaacaceeaa agegeacage taeteteage
                                                                      120
aagagaaaca tgagcattat gaagaaaggt ggcagatttt cagaagaatt tttataaagt
                                                                      180
ttettteeca tetetgetgt tetgteatet eetageeatt gaatggaggt tetatattga
                                                                      240
aatacatctg acaacttcca acaacacttt ttgatgaaga aatagaatct gactatgttc
                                                                      300.
atatagtgga atatattaga acttgcaaca tagccaaact gaagagctat tatggttttt
                                                                      360
gggtggccac atcacatgtc tttatttgtc ctgtaatagc agcattccaa tttaqtqaaa
                                                                      420
taaaagatac taaaattgtg tttact
                                                                      446
```

```
<210> 3292
<211> 1101
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16)...(640)
<223> similar to gi5832782 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3292
tacctggatc gggtgaaggt actggtgttg ggagactcag gtgttgggaa atcttcgtta
                                                                       60
gtecatetee tatgecaaaa teaagtgetg ggaaateeat catggaetgt gggetgetea
                                                                      120
gtggatgtca gagttcatga ttacaaagaa ggaaccccag aagagaagac ctactacata
                                                                      180
gaattatggg atgttggagg ctctgtgggc agtgccagca gcgtgaaaag cacaagagca
                                                                      240
gtattctaca actccgtaaa tggtattatt ttcgtacacg acttaacaaa taagaagtcc
                                                                      300
teccaaaact tgegtegttg gteattggaa geteteaaca gggatttggt gecaactgga
                                                                      360
gtcttggtga caaatgggga ttatgatcaa gaacagtttg ctgataacca aataccactg
                                                                      420
ttggtaatag ggactaaact ggaccagatt catgaaacaa agcgccatga agttttaact
                                                                      480
aggactgctt tcctggctga ggatttcaat ccagaagaaa ttaatttgga ctgcacaaat
                                                                      540
ccacggtact tagctgcagg ttcttccaat gctgtcaagc tcagtaggtt ttttgataag
                                                                      600
gtcatagaga agagatactt tttaagagaa ggtaatcaga ttccaggctt tcctgatcgg
                                                                      660
aaaagatttg gggcaggaac attaaagagc cttcattatg actgaattac actcatcctt
                                                                      720
tggaagagtg agcaagcagt ggcagttttt cacagctcat cttgctgtgt tcaattatta
                                                                      780
ccatcacage ettttaacaa aatcatetta aaatgetace etteageett accetttaat
                                                                      840
ggaaaaatga aaggaagtga caatacggga ggtccaaact ttgtccctqt tctctqtqtt
                                                                      900
cettacettt etgtecetgt gtatagatta tgtaaaagee ttgtgtaaat atgagatgtt
                                                                      960
gtcaaaatga tgcagtaaat gagcaatgac agtgtactgc agagaaaatt tactcttgcc
                                                                     1020
tagaactgga gggtttttat gggtctgtaa ttttcccaca ctcattgctg aaagcttaat
                                                                     1080
taagtacttc aaaaacgtaa a
                                                                     1101
```

```
<211> 364
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(239)
<223> similar to gi804809 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3293 aggaactaga taggctgaac agaccaataa caagtaatga gattgaatca gtcataaaaa 60 gtcttccaaa aaagaaaagt ccacgaccaa agggcttcac tgctgaattc tactgaaact 120 ttaaaaatgt aataccaact tttttcaaac tattccccaa aaaaacgaaa cagaaggaat 180 tcttccaact cgttttacaa gggctttatc ttgaaggcaa aatggcacca ctcaaatgtc 240 catactcaaa tatgccgcat tttggatttt ccctgggctg tcacctccta tcctggcttc 300 aaaactgtgt atagtgagca catctccgcg ggtctcccca ccctgtgggt aacacttgac 360 gata 360

```
<210> 3294
<211> 1695
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (389)...(1361)
<223> similar to gi3874826 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3294
tggaatteet gggtegaega tttegtgaaa gagteattaa eagttaggag ttgatggeag
                                                                       60
tttcaataac aggtcattgc cgagaaaagg atagcactat aatatgcaga aatctacaaa
                                                                      120
ttctgatact tccgtggaaa cactgaattc tacccgccaa ggcacaggag ctqtqcaaat
                                                                      180
gagaatcaaa aatgccaaca gccaccatga caggctcagc caaagtaaat ccatgatcct
                                                                      240
caccgatgtc gggaaggtca ctgaacctat atccagacac agaaggaatc attcacagca
                                                                      300
tatettgaaa gatgteatte etecattgga acaaetgatg gttgaaaaag aaggttatet
                                                                      360
gcaaaaagct aaaattgcag atggaggaaa gaaactaagg aaaaactggt ctacttcctg
                                                                      420
gattgttctt tctagtcgaa gaattgaatt ttacaaagaa tccaagcaac aggctctgtc
                                                                      480
caatatgaaa actgggcaca aaccagaaag tgtggatttg tgtggagcac acattgaatg
                                                                      540
ggccaaggaa aaatcgagca gaaagaatgt ctttcagatc acaacagtat caggaaatga
                                                                      600
gttccttcta cagtcagata ttgacttcat catattggat tggttccacg ctatcaaaaa
                                                                      660
tgcaattgac agattgccaa agggttccaa gttgtccatt caaggaaacc tgggatttat
                                                                      720
ttcaaattcc aaaggttcct ctagcactga attgctaagt cactaccgac agtgatataa
                                                                      780
aagaaccaga aaccatgagc accagaaaat ctttaatgtt cagactgcat cacaqtqctt
                                                                      840
ccgatacaag cgacaaaaat cgagttaaaa gcagattaaa gaagtttatt acccgaagac
                                                                      900
cttccctgaa aactctgcaa gaaaaaggac ttattaaaga tcaaattttt ggctctcatc
```

```
tgcacaaagt gtgtgaacgt gaaaattcca cagttccgtg gtttgtaaag caatgcattg
                                                                     1020
aagctgttga gaaaagaggt ctagatgttg atggaatata tcgagttagt ggcaatctgg
                                                                     1080
caacaataca gaagttaaga tttattgtca accaagaaga gaagctgaat ttggacgaca
                                                                     1140
gccagtggga ggacatccac gttgtcaccg gagcactgaa gatgttttcc gggagctgcc
                                                                     1200
tgagccgctc ttcccttaca gtttctttga gcagtttgtg gaagcgatca aaaagcaaga
                                                                     1260
caacaacaca agaattgaag ctgtaaaatc tcttgtacaa aaactccctc cgccaaatcg
                                                                     1320
tgacaccatg aaagtcctct ttggacatct aactaagtaa gttgtaagga tttctggatg
                                                                     1380
tgtcatttta tagtcatttc ctaaatgggc aatattgaat ttcacatctc taaggcaaga
                                                                     1440
gtttccaaat gcgtacatct cgtattttcc cttgtagctg aactaggtct ttctgcagaa
                                                                     1500
gctggagaat gtgttaggga taggaaggac aatctacaaa aggaacttct gaaataactt
                                                                     1560
atttttcaag gecettteaa etagtatatg tttgetgatt gettgteaga accategeet
                                                                     1620
ggaccetggg atgggteate ttgactttgt tatetaacat aatgaaagaa catgaaatga
                                                                     1680
ttcagacatg gattc
                                                                     1695
```

```
<210> 3295
<211> 2125
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2126)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2126)...(133)
<223> similar to gi2832906 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3295
ttttttttt ttggtggttg tctctaatat ttatttgtct ggttataaaa ttaatatgtg
                                                                       60
aggagcattg gatttggtga gaacgttttg aaccctagct gtcatgtgcc acctgcggga
                                                                      120
tctagaccag tgacttctca gaactgccat ttcctcatct ggtagacagg atggtaagcc
                                                                      180
ctgtcttgct cactccacgt atggcagtgc agatgaaatg agatcacaga ggggaagcaa
                                                                      240
ttggcaggct ggaaagtgct gacaaatgga aggggttgtg tcaccaccct cagctgaggt
                                                                      300
agtaccaagg tecaagetee tgeeceteee ceteeceage ceetaaatac acacacgaat
                                                                      360
ggagggccac ttgcagcctt ggtctgatgg aattgggggc aaggccacac atcttcctca
                                                                      420
agcttggcca gatggggcct cactggggcc cttccagaat cgggcatcgg ctgtggccag
                                                                      480
ctgtgtgagg atctcctcca actcgggtcc atcctctggg aaacgctcag agaaggatcg
                                                                      540
gatgaggcca gcagctgacg cctcgtattc cagaagctgc acgtctgagc cttcaaggcg
                                                                      600
agtgttgggc tgaacaatga gcttccgaga ttccttacgc agcagcaccg tgtccctgag
                                                                      660
ggtgaggaag cacteggggg gegeateagt gaetgttgea tacceetegt acagggeeeg
                                                                      720
eceteeggee acateceetg tggaetteag caeetgaagt eteegeagga agegetetag
                                                                      780.
agcaggettg eccacagace ggatettget geggtegagg eggaceeggg catetgggeg
                                                                      840
cccatcggag cctgtggtgg gagtgatggt aacgagtccc tcgccagcct ccagcaagac
                                                                      900
teteaggate acaaaceggg cetgeatatg ggeetgtege eagttgaagg ceteaggtgt
                                                                      960
gtagaactcc agagcgagca gcccggcccg aaccatgttg agccagttca cgtagatcac
                                                                     1020
gtcctccgca tcagccccct caaagccaaa gatctccagc acttgcgggt ggagacagag
                                                                     1080
gtagagaccc acgctctcag cccggcactc ttcgtagctg gaggcgatgg tgctgaactt
                                                                     1140
```

```
getateceag gteteceege teegatacea getetgaate tgetegeeeg tetetgggtt
                                                                    1200
gatcactgtt tcctggtcaa agttgaatgc tcctttttcg tcctgtacga agagcttgcc
                                                                    1260
actgccatgg cccagcagct cgtgcaggcc cacctgcaca tcgaaggagg gccccttcca
                                                                    1320
gaggatgtac aggtccttgt catcctcctc cagaaaggta agcttctccc gctgcgtggc
                                                                    1380
gtaggecaca gecageacat tecceagega caegttetta aageetteeg tetgeeteag
                                                                    1440
atcatcgtag ttggggatgt tgatgccggc agggatgccg gagccagcga aggtgagaac
                                                                    1500
atccagggag gtgaagtcag gggtgaggaa cttgtccttc tcaaaggttg ggggccaggq
                                                                    1560
cageteette ageagetget etgegetege caccageege teaaaettgg caeteatgge
                                                                    1620
cttgttcacc acagctacga aaccttcaaa ttctcctcgg gaaccaaagg ggtcgcggta
                                                                    1680
getetegatg aaccegatgt aactetecac gatggggeet ttgteetgga tecagaageg
                                                                    1740
ggagcccctc ttgtgggcct cgatggagcc ctgggtgaag ctctctatat actgggccaq
                                                                    1800
catctgcccc tggtggctgt tggctgcata ggccttggct ttctccagct gctccaccac
                                                                    1860
cttctggagg atgggcgct agtcccccg ggtcacctqq aaagqgcttc cccqqaattc
                                                                    1920
atagetette agettggaag teaceteaga gteeagggaa ggetetgage caageacaga
                                                                    1980
agccagccgc acctcgtagt agggettece ttetecateg acctetttaa gageegggtq
                                                                    2040
ttgtaggcac tgaggttctg tgagtccaga aagtcctggn caatttggca tcttccatgg
                                                                    2100
tacaattccc agagaaatag gtggt
                                                                    2125
```

```
<210> 3296
<211> 679
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (641)...(345)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3296
ccagacatca tectageact taaggagetg gaagcagagg tatcatttaa actactteet
                                                                       60
ctgcttccag acatcatcct agcacttaag gagctggaag gttgaacaga aattcttctt
                                                                      120
ggaatccttg aaggtttaga ctccattctt aaagattgga ttctgaatat caggtaacat
                                                                      180
ttttatttgg aatatatgta tacagccttt ttcaaaatcc ctagggccac tcttttgggg
                                                                      240
gtatttaaaa aatgtgttag ctggatctga ggcatcctgt aatcaaaacc aatatatatg
                                                                      300
tagcaaaatg aataacattt ttcaaacttt ttggacttca gaattatgga taacagattg
                                                                      360
taacctcata taaaatcata cttttgcgct ggggaacggt cgtcacgcct qtaatcccaq
                                                                      420
cactttggca ggctgagact ggcagatcat ttgaggtcag gagttcgaga ccaqcctqqc
                                                                      480
caacatgacg aaaccccgtc tcgactaaaa atacaaaaaa attagctgga catggtggca
                                                                      540
cccatctcta ctcccagcta cttgggaggc cgaagaggga ggattgcttg aacccaggag
                                                                      600
gtggaggttg cagtgagctg agatcatgag actgcactcc agcctgggtg acagagtcga
                                                                      660
gactccatct caaaaaaaa
                                                                      679
```

```
<210> 3297
<211> 2228
<212> DNA
```

<213> Homo sapiens

```
<220>
```

<221> misc_feature

<222> (72)...(956)

<223> similar to gi3386611 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3297
ggtttgcttc ctttcccagc atcaatctcc agcaaatgct aaaagaagtc cccaaaaggt
                                                                     60
ttggggatga gagaggtgcc attgttcatt acacqattct caataaccat qtttaccqqa
                                                                    120
gatctttagg gaaatacaca gacttcaaga tgttctctga tgagattttg ttatcattga
                                                                    180
caagaaaggt ccttctccca gatttagaat tttatgttaa tcttggagat tggcccttgg
                                                                    240
agcategaaa agtcaatgga acceetagee ecatacetat cattteatgg tqtqqetete
                                                                    300
tggattcaag agatgttgtc cttccaacgt atgacatcac ccactccatg cttgaaqcca
                                                                    360
tgcggggtgt tacaaatgat ctcctctcta ttcagggaaa tacagggcct tcctggatca
                                                                    420
480
tacagctgtc caaagaaaat cctcagctac tagatgcagg aattacagga tatttctttt
                                                                    540
tccaagagaa agaaaaggag cttggaaaag ccaagttgat gggtttactt gatacttgta
                                                                    600
cttaaagaaa tgtggatggg accgtggctg cttacagata tccatatctc atgctgggcg
                                                                    660
acagtotggt tttaaagcag gactogcoat attatgaaca tttotacatg gcactagaac
                                                                    720
cttggaagca ttatgttcca attaaaagaa atctgagtga tttattagag aaagttaaat
                                                                    780
gggctaagga aaatgatgaa gaagccaaga agattgcaaa agaaggacag ttgatggcta
                                                                    840
gggacctact acagccacac aggctttact gctactatta ccaagtactg cagaaatatg
                                                                    900
ccgagcgcca gtccagcaaa cccgaagtac gtgatggaat ggaacttgtt/cctcaqccag
                                                                    960
aagatagcac agccatctgc cagtgccaca ggaaaaagcc ttcaagagaa gaactttgag
                                                                   1020
tcagcccaga atcacactcc tgtgtatccc ggctacactt taaggaaaga ttgaatctaa
                                                                   1080
gctgtgaagg acagtataga agactgcacc aagtggacta gttctcccgq tqqctttata
                                                                   1140
tatgtagatg gatatagcag tactggttga gtatccctca tctgaaatgc ttaggaccag
                                                                   1200
gagtgtttca ggcttcagat tttttaagat ttgggaatat ttgcatqtac ataatqaqqt
                                                                   1260
atcttgggga tgagatccaa gtctaaacac aaaattcatt tatattttat atataccttq
                                                                   1320
ttcacatacc ctgaaggtaa ttttatataa tatttttaat aatttgtgca tgaaacaaag
                                                                   1380
tttgtataca ttgaactgtc agaaagcaaa ggtgtcacta tcttagcgac ccaagtggtg
                                                                   1440
gtgtcagcac tcaaaaagtt ttggattttg gggtatttca gattttagat ttttgtatga
                                                                   1500
ggaatgttca acctgtattt gaacgaagca ttaccaaata tcgattqaat attaatatct
                                                                   1560
tttgcgtaaa aactgctatt atcagcatca tagtttctct aaaaagaaaa cttggggatc
                                                                   1620
atageegata gagagaettg etaaaatata aateageete tgeaaaaetg titaeatatt
                                                                   1680
tattggttta catattttat tggtttattt ctatcccctg ttcacttttt ctcttccact
                                                                   1740
tccaattatg aagagaaaat atttgttcag ggttgtcccc ccgccccccg tcactgcata
                                                                   1800
atttctcctc ttacaagctg cttttggctt tcattaataa cagcttcctt ttagaaggtc
                                                                   1860
tgataaggat atttaaggaa gaagagaatg actctgttat taaaggtggc atggagactg
                                                                   1920
tggagggaat atttttaaa gcactactca tatcctttaa actaaatttt gccaaagccc
                                                                   1980
gagacaacat taaggagaaa ttgtacctta agttagtaat tccaaatcta tctgagttgt
                                                                   2040
atacccatca aagacaatac agttattaac atagatgaag gtatgctata ggcatcattc
                                                                   2100
attateteta tattgaatag gtgaaagata aetgtagtea ggtgaaagge atteattatt
                                                                   2160
tttaagetga aaaggggate ettgaaaaca etgaaaaeet etacaacaat etteaggaag
                                                                   2220
cctgcttg
                                                                   2228
```

<210> 3298 <211> 2017

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (107)...(296)
<223> similar to gi2198815 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3298
tttcgtgcgg gagatcagag gtcccgccgt cccgcgcctg acctcggctg aggacaggca
                                                                       60
ccgccatggg ccacacgcac acagcccgga gttgcagcgg accggcagag attacagcct
                                                                      120
ggactacetg ceetteegee tatgggtggg catetgggtg getacetttt geetggtget
                                                                      180
ggtggccaca gaggccagtg tgctggtgcg ctacttcacc cgcttcactq aggaaggttt
                                                                      240
etgtgeeete ateageetea tetteateta egatgetgtg ggeaaaatge tgaacttgae
                                                                      300
ccatacctat cctatccaga agcctgggtc ctctgcctac gggtgcctct gccaataccc
                                                                      360
aggcccagga ggaaatgagt ctcaatggat aaggacaagg ccaaaagaca gagacgacat
                                                                      420
cgtaagcatg gacttaggcc tgatcaatgc atccttgctg ccgccacctg agtgcacccg
                                                                      480
gcagggagge caccetegtg gecetggetg teatacagte ccagacattg cettettete
                                                                      540
cettetecte treettactt etttettett tgetatggee etcaagtgtg taaagaccag
                                                                      600
ccgcttcttc ccctctgtgg tgcgcaaagg gctcagcgac ttctcctcag tcctggccat
                                                                      660
cetgetegge tgtggcettg atgettteet gggcetagee acaccaaage teatggtace
                                                                      720
cagagagttc aagcccacac tccctgggcg tggctggctg gtgtcacctt ttggagccaa
                                                                      780
eccetggtgg tggagtgtgg cagetgeeet geetgeeetg etgetgteta teeteatett
                                                                      840
catggaccaa cagatcacag cagtcatcct caaccgcatg gaatacagac tgcagaaggg
                                                                      900
agetggette cacetggace tettetgtgt ggetgtgetg atgetactea cateageget
                                                                      960
tggactgcct tggtatgtct cagccactgt catctccctg gctcacatgg acagtcttcg
                                                                     1020
gagagagagc agagcctgtg cccccgggga gcgccccaac ttcctgggta tcagggaaca
                                                                     1080
gaggetgaca ggeetggtgg tgtteateet tacaggagee tecatettee tggeacetgt
                                                                     1140
gctcaagttc attccaatgc ctgtgctcta tggcatcttc ctgtatatgg gggtggcagc
                                                                     1200
geteageage atteagttea etaatagggt gaagetgttg ettgatgeea geaaaaeace
                                                                     1260
agccagacct gctactcttg cggcatgtgc ctctgaccag ggtccacctc ttcacagcca
                                                                     1320 .
tcagctttgc cctgtctggg gctgctttgg gataatcaag tctacccctg cagccatcat
                                                                     1380
etteecete atgttgetgg geettgtggg ggteegaaag geeetggaga gggtttttte
                                                                     1440
accacaggaa ctectetgge tggatgaget gatgecagag gaggagagaa geatecetga
                                                                     1500
gaaggggctg gagccagaac actcattcag tggaagtgac agtgaagatt cagagctgat
                                                                     1560
gtatcageca aaggeteeag aaatcaacat ttetgtgaat tagetggagt aggagtetgg
                                                                     1620
gagtggagac cccaggaaac agcatgaggt gcttactcag gaagtcagga catttttggc
                                                                     1680
ctttggctta acttccagat gctcagtcgg cttggggaag gactgaaggg cagctgccaa
                                                                     1740
gacctcagtt acctcctgac ctgagggtgg agagtggcag gaagcaaqca tqtttqctqt
                                                                     1800
gcacttagga aaggctggtg agccagaggg actgatcagg ccccattcac tctctactca
                                                                     1860
ttaaaaggtc ctgagccacg aagcgcttcc cattttgaac tttctgtcct cacagattct
                                                                     1920
gtttgacaga atctaagggc catcagggaa ctcttttcat cttgcaaaga gaaaaagcca
                                                                     1980
gtctttccag aataaatatt catctgtttg aaataaa
                                                                     2017
```

```
<210> 3299
<211> 1056
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (1046)...(9)
<223> similar to gi5917666 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 3299
tttcgtgttc tgggaacgca gcagtgaccg gcctgtccgg tggttccctg ccaggtgcgg
                                                                       60
ggtgtgagga gacagatgca tggataagtc teegtgggaa aeteaggeet ttgteetgge
                                                                      120
ggaggggaat gggtctgagg cagcctctgc cgggctggcg gcctgtctgg ctgcgcgtcc
                                                                      180
tgcagcaccg gcctcacccc cagcacacgc ccgccaggag cgcaggggcc ccgaggatgg
                                                                      240
aagegtetgt etgaggeget gteetgggae eecaceeege ettegggget gatgeacaga
                                                                      .300
ccgggaattg aggatacctg gtgtggagga ggccgctgtg tttgggcctg ggtctgaagg
                                                                      360
gtgagtgggt gtcattgtgg ccacgggccg gggtcggggg agcattcagg tggccggagg
                                                                      420
aggçctggca cagggaaggg cagtgagggg cccgggtggg gccaggagat agaggggcgg
                                                                      480
gaccaggcct gtgggacagt ttgaatcacg cggggagttt ggtctttatg ggaagaaagg
                                                                      540
egeegtggee atteggagag ceaetetgge actgetgeeg gtgeggteeg gggetgeggg
                                                                      600
gcctcctcct gggcctgaac tgcagggctg gtgggggcca tgggggaagg tggctccaca
                                                                      660
ggtccccgga gctgggggag caggaggatg gggttgacca ggagggaaag ctatggagct
                                                                      720
ggagaatgca ggaggccccc gaggggaggt gcagccagcg ctggtgggga ggcctctgag
                                                                      780
gggtacgcgg taattgacat cacgggtgtg ggtgagagtg gctttcaaag catcggctgg
                                                                      840
agcagggtcc ccattaaagc cagagacgct gacgccatgg ggctggggtt ggggctgggc
                                                                      900
cggggctttg ggaggtccga actccccagc agggagccag ggctctgggc cagttcccag
                                                                      960
gcccagttaa tcttcagtag aatcgatcga ccttggctca gagggttgga ggcagggatg
                                                                     1020
ggcaaagggt gaggggtgag gcgcacgaat ggcgaa
                                                                     1056
```

```
<210> 3300
<211> 430
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (36)...(283)
<223> similar to gil619929 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3300
cataattcgg cacgagggaa accagggagc ccccctactt cagtgtagag tcagcaaaac
                                                                       60
ctgtgcagga cttctatgcc aaaattataa agcactgacg aaagaaagtg aaagggatct
                                                                      120
aagtaaataa ggagacatac catgitcatt aattitaaga ctcaacatag caaagtcgtc
                                                                      180
aattetteec aaatggatgt gggtttaatg caatteetat caaaatetea gcaatagtgt
                                                                      240
ttctagataa agacaaaatt attctaacat ttacatggaa aagcaagtga actagaatag
                                                                      300
ctcaaacaat tctggatgaa aagaacaaac tagtaggaat caatttcaat atagctacgt
                                                                      360
aatcaagacc ctgtggtatt gctgaagaaa cagacacata gatcaatgga actaacacaa
                                                                      420
tatacccaca
                                                                      430
```

```
<210> 3301
<211> 2248
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1973)...(1345)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3301
geggtatteg geaegagett ecetecetee ettetetegt etecteceea etgegeetee
                                                                       60
eteceteetg geetteette eettaceega etttgeagat ttetetteee eeaggeetee
                                                                      120
etectecace tetecgecee etecgggett ggetetecca ggaggetacg actggageca
                                                                      180
etggteeege aggateeeeg egteeteggt egeegegtee aegteeetet egegteeeeg
                                                                      240
cccggcgcca cgccgcctcc tctgggttcg gcctccgcgc ggtgcagcgc agtctcaggc
                                                                      300
cgcgggacaa gcccgactta aatctctgca atggctaacg aagcttatcc ttgtccgtgt
                                                                      360
gacattggcc acagacttga gtatggaggg ctaggccgtg aagttcaagt cgagcacatc
                                                                      420
aaggettatg teaceaaate eccegttgat geaggeaaag etgtgattgt eatteaagat
                                                                      480
atatttggct ggcagttgcc caataccaga tatatagctg acatgatctc aggaaatgga
                                                                      540
tacacaacca ttgttccaga cttctttgta gggcaagagc cttgggaccc ctctggcgac
                                                                      600
tggtctatct tccctgagtg gctgaaaaca agaaatgccc agaagatcga tagagagatc
                                                                      660
agtgctatct tgaagtatct gaaacaacag tgtcatgccc agaaaattgg catcgtggga
                                                                      720
ttetgetggg gtggaactge tgtecateat ttgatgatga aataeteaga atteagggéa
                                                                      780
ggggtgtccg tctatggcat cgtcaaggat tctgaagaca tttacaattt aaagaacccc
                                                                      840
actitigation tittitigation anatogatigati gitgaticac teanggacgi atettitigatig
                                                                      900
actcagaagt tgaaagaaca ctgcaaagtt gaatatcaaa ttaaaacatt ttctgggcag
                                                                      960
actcatgggt tcgtgcatcg gaagagagaa gattgctcac ctgcagacaa gccctacatt
                                                                     1020
gacgaggcca gaaggaattt aattgagtgg ctgaacaagt acatgtagca agaatcaagg
                                                                     1080
gcaagcette ctagaatage tttcatecca aaatttgett ggaaatagtt agatcatttg
                                                                     1140
atttaatttt cacttttata aaataagtgt aggaatccta aaattgatta tttcatttga
                                                                     1200
aacacaaatt cagtaggacg taatgcatga aataatttaa tttttgacat gtacatcgaa
                                                                     1260
tcataattta aaaacaaggt ctgaccaggt gtagtgcctc atgcctgtaa ttccagcact
                                                                     1320
ttgggaggcc aaagtgggtg gatcacctga ggtcaggagt ttgagaccag cctggccaac
                                                                     1380
atggtgagac cccatctcta caaaaaatac aaaaattagc ctggtgtggt ggtgcacqcc
                                                                     1440
tgtagtccca gctacttggg aggctgaggc acaagaatca atagaaccca ggaggtggag
                                                                     1500
actgcagtga gccaagattg tgccactact gtactctagc ctgggcagca gagtgagacc
                                                                     1560
ctgtctcaaa aataaataag taaataaata aataaataaa ataaaaacca ggtcagtacc
                                                                     1620
tggagaattt gaatgataga gaatgataga gtaataccct aattattagt taaaacctac
                                                                     1680
aggccgggtg cggtggctca cgcctgtaat cccagcactt tgggaggccg aggtgggtgg
                                                                     1740
atcacttgag gtcaggagtt caagaccagc ctggccaaca tggtgaaacc ccatctctac
                                                                     1800
taaaaatata aaaatcagcc gggcatggtg gcatgtgcct gtaatcccag ctactcagga
                                                                     1860
gtctgaggag gagaatcact tgaacctgga ggcagaggtt gcagtgagtc gaggttgcgc
                                                                     1920
tactgcactc cagcctggac aacagaggga gactctgtct ccaaaaaaaa aaaaacctac
                                                                     1980
agctgttcaa ggaccagctg acaggtcaag tgtggccttt tctggtcttt gaacacatca
                                                                     2040
tagaaagtga caaatgctgc aaagccatga agaacatgaa ctataaacgg gtagactaac
                                                                     2100
tgcccagctt agacacttat ctatgccaca aaacagctga atttgtcaca tttatatatt
                                                                     2160
gcaatatggg aagtattgag atcaaaacag gattccattg acctaattat attaagctaa
                                                                     2220
taaactaatt ttttgaattt ttgaaaaa
                                                                     2248
```

```
<210> 3302
<211> 2352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1238)
<223> similar to gi36603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3302
cggctccggg agctctgtca acagtggcta cagcccgaga cccataccaa ggagcagatc
                                                                       60
etggagetge tggtgetgga geagtttetg atcatectge ctaaggaget ccaggeeegg
                                                                      120
gtgcaggagc atcacccaga gagcagggag gacgtggttg ttgttctgga ggatttgcag
                                                                      180
ctggatettg gagaaacagg acaacaggtg gacccagacc agccaaagaa acaaaaaata
                                                                      240
cttgtggagg agatggcccc tctgaaagga gtacaggaac agcaggttcg gcatgagtgt
                                                                      300
gaagttacaa agcctgagaa agagaagggt gaggagacaa ggattgagaa tgggaagctt
                                                                      360
attgtagtaa cagactcttg tggaagagta gagtcatctg ggaaaatatc tgaacccatg
                                                                      420
gaggeteata atgagggete taaettggaa aggeateagg eeaageeeaa agagaagatt
                                                                      480
gagtataaat gctcagaacg tgagcagaga ttcatccagc acttggacct gattgaacat
                                                                      540
gcgagtacac acacgggaaa gaaactctgc gagtctgatg tgtgtcaqaq ttccaqtctt
                                                                      600
acaggacata agaaagtcct ctcttaggag agaaaggtca tccagtgttc atggagtttt
                                                                      660
ggggaaagcc tttcagagga gttcacacct cgtcagacat cagaaaatcc atcttggtga
                                                                      720
gaagccttat cagtgcaatg agtgtggcaa agtctttagc cagaatgcag gccttttgga
                                                                      780
acateteaga atteatactg gagagaaace ttatetatgt atecattgtg gaaaaaattt
                                                                      840
taggogoago totoacotta atogacatoa gagaattoac agtoaggagg agcootgtga
                                                                      900
gtgcaaggag tgtggaaaaa cctttagtca ggccttactc ctcacccacc atcagagaat
                                                                      960
ccatagtcac tccaaaagcc atcaatgtaa cgagtgtgga aaagctttca gtttgacctc
                                                                     1020
agaccttatt cgacaccaca gaattcatac tggagaaaaa cctttcaagt gtaacatatg
                                                                     1080
ccagaaagcc ttccgactaa actcacacct tgctcagcat gtaagaatcc acaatgaaga
                                                                     1140
aaaaccctat cagtgtagtg aatgtggaga agccttcagg caaaggtcag gtctttttca
                                                                     1200
acatcagaga tatcaccaca aagacaaact ggcttgatga ggtgttctct ccttgtagaa
                                                                     1260
catcagagaa ggcacattga ctagcaaaca gcactttagg aaaagtcacc gtagcccact
                                                                     1320
gtggcatcag aaaattettg ggggctgagt tggaggetee etgeetetat teteteteet
                                                                     1380
ttgctttcct tgaagtcagc tttggaccac aataatttca ctgtagatga tatgctagga
                                                                     1440
tcaaagttaa acagcattct tcactgcagg acatctcaga gcatgtaaca taactgcatg
                                                                     1500
attatatact ctaagcaata gagagcttca tgactgagta agagttttga agtcagcagt
                                                                     1560
gaatcaagtg cccacagatt tgcaggctta agcagaacaa gggaagattg atatttttgg
                                                                     1620
atatgctata gcagctttct cctatgaaat aaaactgatg atgtttggaa gtatactact
                                                                     1680
ctcaaaggtg tctttaaagt acaggttaat ggtgaacatt ttcccccagt ggcttcacct
                                                                     1740
cattectece actggeetta eccetteett ecceagtgga ageattttea aaageaaaga
                                                                     1800
taattttcgc tggtgaactt cagaacttgc cttcagggtt agcttcatgt aattttacca
                                                                     1860
tttcccatcc ccattcccca ccacattatg tcaagattca agttataaat taacgtttta
                                                                     1920
cttagacttt gaaagagatt tcatgagtaa tttgaatgaa ccttgctgaa ttaatctgaa
                                                                     1980
tagcaactgt ctgacttgat aactccagtg ccagtatagt ggctgctgca tagacactat
                                                                     2040
tcagtaaatg tctgatgaaa gaaattggac tttttccctt taatactgat gatgcaattt
                                                                     2100
tgaaatgttg cttgttctgg aatacttcgg aagttaaaca ataaagtcag cttggagagg
                                                                     2160
agatcatgat ctttatactg tgaatagcag aatgtcacag atgaagaata ttaaaattag
                                                                     2220
```

```
gggcgtccac tccaaaacat atcaccagag tgacaacttc agccctcagc ctctgcaatc 2280 catatatatc ctggtcttgg gagtccatag aatactgttt ccttctaata aaggtttcaa 2340 acaaaaaaaa aa 2352
```

```
<210> 3303
<211> 2900
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2637)
<223> similar to gi4028015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3303
atggggctca aggcgcgcag ggcggcgggg gcggctggcg gcggcggcga cggggggggcggc
                                                                       60
ggaggcggcg gggcggctaa cccagccgga ggggacgcgg cggcggccgg cgacgaggag
                                                                      120
cggaaagtgg ggctggcgcc cggcgacgtg gagcaagtca ccttggcgct cggggccgga
                                                                      180
gccgacaaag acgggaccet gctgctggag ggcggcggcc gcgacgaggg gcagcggagg
                                                                      240
accccgcagg gcatcgggct cctggccaag accccgctga gccgcccagt caagagaaac
                                                                      300
aacgccaagt accggcgcat ccaaactttg atctacgacg ccctggagag accgcggggc
                                                                      360
tgggcgctgc tttaccacag cgttggtgtt cctgattgtc ctaggggtgc ttgattctgg
                                                                      420
etgteetgga ceacatteaa ggagtatgag actgtetegg gagaetgget tetgttaetg
                                                                      480
gagacatttg ctattttcat ctttggagcc gagtttgctt tgaggatctg ggctgctgga
                                                                      540
tgttgctgcc gatacaaagg ctggcggggc cgactgaagt ttgccaggaa gcccctgtgc
                                                                      600
atgttggaca tetttgtget gattgeetet gtgeeagtgg ttgetgtggg aaaccaagge
                                                                      660
aatgttetgg ccacctccct gcgaagcctg cgcttcctgc agatcctgcg catgctgcgg
                                                                      720
gatggaccgg gagaaggtgg cacctggaag cttctggggc tcagccatct gtgcccacag
                                                                      780
caaagaactc atcacggcct ggtacatcgg tttcctgaca ctcatccttt cttcatttct
                                                                      840
tgtctacctg gttgagaaag acgtcccaga ggtggatgca caaggagagg agatgaaaga
                                                                      900
ggagtttgag acctatgcag atgccctgtg gtggggcctg atcacactgg ccaccattgg
                                                                      960
ctatggagac aagacaccca aaacgtggga aggccgtctg attgccgcca ccttttcctt
                                                                     1020
aattggcgtc tecttttttg ecettecage gggcatectg gggteeggge tggeecteaa
                                                                     1080
ggtgcaggag caacaccgtc agaagcactt tgagaaaagg aggaagccag ctgctgagct
                                                                     1140
cattcaggct gcctggaggt attatgctac caaccccaac aggattgacc tggtggcgac
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atggagattt tatgaatcag tcgtctcttt tcctttcttc aggaaagaac agctggaggc
                                                                     1260
agcatccage caaaagctgg gtctcttgga tcgggttcgc ctttctaatc ctcgtggtag
                                                                     1320
caatactaaa ggaaagctat ttacccctct gaatgtagat gccatagaag aaagtccttc
                                                                     1380
taaagaacca aagcctgttg gcttaaacaa taaagagcgt ttccgcacgg ccttccgcat
                                                                     1440
gaaageetae getttetgge agagttetga agatgeeggg acaggtgaee ecatggegga
                                                                     1500
agacaggggc tatgggaatg acttccccat cgaagacatg atccccaccc tgaaggccgc
                                                                     1560
catccgagcc gtcagaattc tacaattccg tctctataaa aaaaaattca aggagacttt
                                                                     1620
gaggccttac gatgtgaagg atgtgattga gcagtattct gccgggcatc tcgacatgct
                                                                     1680
ttccaggata aagtaccttc agacgagaat agatatgatt ttcacccctg gacctccctc
                                                                     1740
cacgccaaaa cacaagaagt ctcagaaagg gtcagcattc accttcccat cccagcaatc
                                                                     1800
teccaggaat gaaccatatg taggecagae catecacatt cagaaatteg aagaccaaag
                                                                     1860
gcattgatgg gggaagtttg ttaaaagttt gaaaggacag gtttcaggga ctggggagga
                                                                     1920
agetggaett cetegtggat atgeacatge aacacatgga aeggttgeag gtgeaggtea
                                                                     1980
cggagtatta cccaaccaag ggcacctcct cgccagctga agcagagaag aaggaggaca
                                                                     2040
```

```
acaggtatte egatttgaaa accateatet geaactatte tgagacagge eeeeeggaac
                                                                     2100
caccctacag cttccaccag gtgaccattg acaaagtcag cccctatggg ttttttgcac
                                                                     2160
atgaccetgt gaacetgeec egagggggae ceagttetgg aaaggtteag geaacteete
                                                                     2220
cttcctcage aacaacgtat gtggagagge ccacggtcct gcctatcttg actcttctcg
                                                                     2280
actocogagt gagotgocac toccaggotg acotgoaggg cocotactog gacogaatot
                                                                     2340
ecceeggea gagaegtage ateaegegag acagtgaeae acetetgtee etgatgtegg
                                                                     2400
tcaaccacga ggagctggag aggtctccaa gtggcttcag catctcccag gacagagatg
                                                                     2460
attatgtgtt cggccccaat ggggggtcga gctggatgag ggagaagcgg tacctcgccg
                                                                     2520
agggtgagac ggacacagac acggacccct tcacgcccag cggctccatg ccctctgtcg
                                                                     2580
tccacagggg atgggatttc tgattcagta tggacccctt ccaataagcc catttaaaag
                                                                     2640
aggtcactgg ctgacccctc cttgtaatgt agacagactt tgtatagttc acttactctt
                                                                     2700
acaccegacg ettaccageg gggacaccaa tggetgeate aaatgeatge gtgtgegtgg
                                                                     2760
tggccccacc caggcagggg cttcccacag cctcttcctc cccatgtcac cacaacaaag
                                                                     2820
tgcttccttt tcagcatggt ttgcatgact ttacactata taaatggttc ccgctaatct
                                                                     2880
cttctaggat aaaaaaaaa
                                                                     2900
```

```
<210> 3304
<211> 1911
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1881)...(1582)
<223> similar to gil177607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3304
cccttctcgg ctgtgtggct tcgacttcct gattctccca cgacgtccct ggccgggaga
                                                                       60
cccgctggac tctgcggctg gccaaaaggg gagggggagc cccgcgtcct gggggcccct
                                                                      120
ageggaaggg gegggggttg egetgggeat eetgtetggg geatetgtet gggaetetgt
                                                                      180
tggtgcctct cacctggcga ggggcctgtg gtgggggtag gggggaagtc cctggcgcca
                                                                      240
tgcttggcca agecetgete tgctgggctg egggctggeg gegeteacec agetecteae
                                                                      300
ctgtcccgca tcttcctgtt tttcttccct ttctggttgg gcagcgagag ttgagaggag
                                                                      360
gcagatggct tccatcccag aaatcgctct cctctttcca tccctacaga gagggacaga
                                                                      420
gaggcaaagt teettgeate eeeeggggea etgteeetgt gageteeegg tgteetgeae
                                                                      480
atgtgagece etgagteace gggeetgtga gtgtgggatg gggeteegtg geeageetgg
                                                                      540
cctcctgggg ttcactttgt gctttcctac gccaactctt cctgtgtggc tttgctggcc
                                                                      600
ttccactgag gaggcacata ggtttggagg acagatgagg gcccactgga gagctgtacc
                                                                      660
cctcagtgag ggccgccacc ttgatggttt ttgatggata atggggttga cctctttgtt
                                                                      720
cettecacat gtttttatgt ttgaccattt geteagetga gettgtetta ataattggat
                                                                      780
tcatggttaa tgagccccac atgggcgaga gggtggcctt cattctgaac ccatttaggc
                                                                      840
agcacgggca gccctcctcg ccatgggcag gatcagagcc cccccgccca gtcttggggt
                                                                      900
tgctcctgga tgctgtctgg gaggcttgct catggtgaca tcctcatctc cccgtgcacg
                                                                      960
ttaccgcatt cagagettgg gtcacctgga cactgaactc aggtgaattt tetetgagat
                                                                     1020
cccgggagaa ggaggacagt tctttggaag gttttccagg gccgatcacg gaaaggatga
                                                                     1080
gaagggagag gtcctggtgg gggacacaat tacagtggca gtgtaacacc cggaaacttt
                                                                     1140
attgcgtgaa gtccctctca ctccctctac ctccttcttt tacgtggact ctgccaaaga
                                                                     1200
ccaggatacc agaatgccag tggagtgacc aagtgtagtg ggaccttggg aacgcgagtc
                                                                     1260
tggagccagg cggctggggt ttgcatcctg gttctgcccc tccttagctg gctgacatgg
                                                                     1320
```

```
cacaagccac ttaccctctc tgagccttac tgtcttcagt ggcaaatgga tctgtcaaca
                                                                     1380
ggccccattg cctggggttg ttactgctga gattaaggga tgctcgtcca taaaaagact
                                                                     1440
tagcgttgtg cctggcacat agtgtatggt ggataaatgg gacttaggac taaaactcat
                                                                     1500
gccttggtgt gtttttgcag tgatgttttg ttctggggtg catcacaaga gacaaggttc
                                                                     1560
ttggctgggc atggtggctc aggccaataa tcccagcact ttgagaggcc gaaaggggag
                                                                     1620
gategettga geccaggagt ttaggacegg cetgggeaeg gtggtgaage etcatateaa
                                                                     1680
ccaaaaataa aaaaataaaa aataaagcca ggtatggtgg tgtgtgcctg tggtcccagg
                                                                     1740
tgctttggag gctgaggtgg gaggattgct ggagtctgga gggtcgggct gcagtgagct
                                                                     1800
gtggtcgtgc cactgcactc cagcctgggt gacaaagtga gactctgttt caaggaaaag
                                                                    1860
agagagagag agacagacag atccacaaga gtcttaagcc agaatcttca t
                                                                     1911
```

```
<210> 3305
<211> 5433
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(2065)
<223> similar to gi5902966 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3305 cggacgcgtg ggatcattga atttgaccca aagtatactg ccttcgaagt ggaggaagat 60 gttgggctga tcatgatccc agtggtgagg ctacatggaa cttatggcta tgtgacagct 120 gatttcatct ctcagagctc ctctgccagt cccggaggtg ttgattacat tttgcatggc 180 agtacagtca cettteagea tgggcaaaac ttaagtttta taaatatete cateattgat 240 gacaatgaaa gtgaatttga ggagcccatt gaaattctac tcactggagc tactggagga 300 geggteettg ggegecaeet agtgageaga ateataatag etaagagtga etetecettt 360 ggagttataa ggtttctcaa tcaaagcaaa atttctattg ctaatcccaa ttccacaatg 420 attttatcac tggtgctgga gcggactgga ggactcttgg gagagattca ggtgaactgg 480 gagacagtag gacccaactc tcaagaagcc ttactgccac agaatagaga cattgcagac 540 ccagtgagcg ggttgttcta ttttggagaa ggagaaggag gagtgagaac cataattctg 600 acaatctatc ctcatgaaga aattgaagtt gaagagacat tcattattaa acttcatctt 660 gtgaaaggag aagctaaatt agactccaga gctaaagatg ttacattaac catacaagag 720 tttggtgacc caaatggagt tgttcagttt gctcctgaaa ctttgtctaa gaagacttat 780 teagageete tggetetgga agggeeetg eteattacet tetttgteag aagagteaag 840 ggcacctttg gagagattat ggtttactgg gaattaagta gtgagtttga cattactgaa 900 gactttettt ccaccagtgg atttttcacc attgctgatg gagagagtga agctagettt 960 gatgttcatt tgctaccaga tgaggtacct gagatagagg aagattatgt gatccagctt 1020 gtttctgtag agggaggagc cgaactggat ctggagaaga gtatcacatg gttctctgtt 1080 tatgcaaatg atgacccaca tggagtattt gccctgtatt cggatcgcca gtcaatactt 1140 attgggcaga accttattag atccatccaa attaacataa cccggcttgc tggaacattt 1200 ggagatgtgg ctgttgggct tcgaatatca tcggatcata aagaacagcc gattgttacc 1260 gaaaatgcag agaggcagct ggtggtcaaa gatggtgcca catataaagt ggacgtggtg 1320 ccaataaaga atcaggtett ectateactg ggetetaatt teaetttgea actggtgaet 1380 gtgatgettg teggtggaeg tttetatgga atgecaacaa ttetteagga agcaaaatet 1440 gctgtccttc cagtctctga gaaagctgcc aattctcagg tcggatttga atccactgct 1500 tttcaactca tgaacatcac tgctggcaca agccacgtta tgatttctag gagaggcaca 1560 tatggagete teteggttge etggaceaet ggatatgete etgggttaga aatteetgaa 1620

```
ttcattgttg ttggcaacat gaccccaaca ctggggagcc tttcattttc ccacggtgaa
                                                                     1680
caaaggaaag gagttttcct gtggacgttt cctagccctg gttggccaga ggcctttgtt
                                                                     1740
cttcacctat caggagtgca gagcagtgct cctggcggag ctcaactccg atcaggtttc
                                                                     1800
attgttgctg aaattgaacc aatgggcgtc ttccaatttt ccactagctc aagaaatatc
                                                                     1860
atagtgtcag aagatacaca gatgatcaga ttacatgtac aaagactatt tgggttccac
                                                                     1920
agcgatctta ttaaagtttc ttatcagacc actgcaggaa gcgccaagcc actggaagat
                                                                     1980
tttgagcctg ttcagaatgg ggaactgttt tttcaaaaat tccaaactga ggttgatttt
                                                                     2040
gaaataacca ttattaatga tcagctttct gagatagaag aattttttta cattaacctt
                                                                     2100
acttcagtag aaattagggg attacaaaag tttgatgtta attggagccc acgcctgaat
                                                                     2160
ctagatttca gtgttgcagt gattacaata ttggataatg atgacctggc aggaatggat
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atttccttcc ccgagacaac tgtggctgta gcagttgaca caactctcat tcctgtagaa
                                                                     2280
actgaateca ccacatacet cageacaage aagaegaeta ccattetgea gecaaceaae
                                                                     2340
gtggttgcca ttgttactga ggcaactggt gtatctgcca tccctgagaa acttgtcacc
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cttcatggca cacctgctgt gtctgaaaag cctgatgtgg ccactgtaac tgccaatgtt
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tccattcatg gaacattcag ccttgggcca tccattgttt atattgaaga ggagatgaag
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aatggcacat tcaacactgc agaagttctt atccgaagaa ctggtgggtt tactggcaat
                                                                     2580
gtcagcataa cagttaaaac tttcggtgaa agatgtgctc agatggaacc aaatgcattg
                                                                     2640
ccctttcgtg gtatctatgg gatttccaac ctaacatggg cagttgaaga agaagacttt
                                                                     2700
gaagaacaaa ctcttaccct tatattccta gatggagaaa gagaacgtaa agtatcagtt
                                                                     2760
caaattttgg atgatgatga gcctgagggg caggaattct tctacgtgtt tctcacaaac
                                                                     2820
cctcaagggg gagcacagat tgtggagggg aaggatgata ctggatttgc agcttttgcc
                                                                     2880
atggttatta ttacagggag tgaccttcac aatggcatca taggattcag tgaggagtcc
                                                                     2940
cagagtggac tagaactcag ggaaggagct gttatgagaa gattgcacct tattgtcaca
                                                                     3000
agacagccaa acagggcctt tgaagatgtc aaggtctttt ggcgagtcac acttaacaaa
                                                                     3060
acagtegteg tgetecagaa ggatggggta aacetgatgg aggaacttea gtetgtgtea
                                                                     3120
gggaccacaa cctgtacaat gggtcaaaca aaatgcttta tcagcattga actcaaacca
                                                                     3180
gaaaaggtac cacaggttga agtgtatttt tttgtggaac tatatgaagc tactgctgga
                                                                     3240
gcagcaataa acaacagtgc cagattcgca cagattaaaa tcttagaaag tgatgaatct
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caaagccttg tgtatttttc tgtgggttct cggctggcag tggctcacaa gaaggccact
                                                                     3360
ttaatcagtc tgcaggtggc cagagattct gggacaggac taatgatgtc tgttaacttt
                                                                     3420
agtacccagg agttgaggag tgctgaaaca attggtcgta ccatcatatc tccagctatt
                                                                     3480
tctggaaagg attttgtgat aactgaaggc acattggtct ttgaacctgg ccagagaagc
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actgtattgg atgtcatcct aacgccagag acaggatctt taaattcatt tcctaaacgc
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ttccagattg tcctttttga cccaaaaggt ggtgccagaa ttgataaagt gtatgggact
                                                                     3660
gccaacatca ctcttgtctc agatgcagat tcgcaggcca tttgggggct tgcagatcag
                                                                     3720
ctacatcage etgtgaatga tgatattete aacagagtge tecataccat cagcatgaaa
                                                                     3780
gtggccacag aaaacacaga tgaacaactc agtgccatga tgcatctaat agaaaagata
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actactgaag gaaaaattca agettteagt gttgccagee gaactetttt ctatgagatt
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ctttgttctc ttattaaccc aaagcgcaag gacactaggg gattcagtca ctttgctgaa
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ttgactgaga attttgcctt ttctctgctg actaatgtta cttgcggctc tcctggtgaa
                                                                     4020
aaaagcaaaa ccatccttga tagttgccca tatttgtcaa tattggctct tcactggtat
                                                                     4080
cctcagcaaa tcaatggaca caagtttgaa ggaaaggaag gagattacat tcgaattcca
                                                                     4140
gagaggetae tggatgteea ggatgeagaa ataatggetg ggaaaagtae atgtaaatta
                                                                     4200
gtccagttta cagagtatag cagccaacag tggtttataa gtggaaacaa tcttcctacc
                                                                     4260
ctaaaaaata aggtattatc tttgagtgtg aaaggtcaga gttcacaact cctgactaat
                                                                     4320
gacaatgagg ttctctacag gatttatgct gctgagccta gaattattcc tcagacatct
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ctgtgtctcc tttggaatca ggctgctgca agctggttgt ctgacagtca gttttgcaaa
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gtgattgagg aaactgcaga ctatgtggaa tgtgcctgtt tacacatgtc tgtgtatgct
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gtetatgete ggaetgaeaa ettgtettea tacaatgaag eettetteae ttetggattt
                                                                     4560
atatgtatct caggtetttg ettggetgtt ettteccata tettetgtge caggtactee
                                                                     4620
atgtttgcag ctaaacttct gactcacatg atggcagcca gcttaggtac acagattctg
                                                                   . 4680
tttctggcgt ctgcatacgc aagtccccaa ctcgctgagg agagctgttc agctatggct
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gctgtcacac attacctgta tctttgccag tttagctgga tgctcattca gtctgtgaat
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ttctggtacg tgctggtgat gaatgatgag cacacagaga ggcgatatct gctgttttc
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cttctgagtt ggggactacc agcttttgtg gtgattctcc tcatagttat tttgaaagga
                                                                     4920
atctatcatc agagcatgtc acagatctat ggactcattc atggtgacct gtgtttatt
                                                                     4980
ccaaacgtct atgctgcttt gttcactgca gctcttgttc ctttgacgtg cctcgtggtg
                                                                     5040
```

```
gtgttcgtgg tgttcatcca tgcctaccag gtgaagccac agtggaaagc atatgatgat 5100 gtcttcagag gaaggacaaa tgctgcagaa attccactga ttttatatct ctttgctctg 5160 atttccgtga catggctttg gggaggacta cacatggcct acagacactt ctggatgttg 5220 gttctctttg tcatttcaa cagtctgcag cttctagtac cctctgttct acttttact 5280 tctatgagat caacattttt tagcttccac acagggactc tgacttcaag agagaagaaa 5340 agtacttttg tacttacatg cctactgagc ccagattcca aaggccttgg ggttctatgt 5400 ttccttaaca ctgaatgggc tttccaagtg cat 5433
```

```
<210> 3306
<211> 895
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (802)...(236)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3306
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                                                                       60
ctcagctcac tgcaacctcc acttcctggg ttcaagtgat tctcctgccc cagcctccca
                                                                      120
agtagctggg accacaggca atgcaccacc acaccaagct aatttttgta tttttagtag
                                                                      180
agatgaggtt tcaaccatgc tggccaggct gggtcttgaa ctcctgacct caagtgatcc
                                                                      240
acctaccaca gcctcctaaa gtactgggat tacaagcatg agccactaca cccgacctca
                                                                      300
tagtagtttt gatttacact tecetaatga ttgtgtecag catetactgg ceatttgtta
                                                                      360
gtggtttttt tettettta agaactgetg agacatecat aaacatttte aaaatgeagg
                                                                     420
gtatgttttt cagtgttaag gcaactgttc tgatgtgttt ttcctttgct ctctatcacc
                                                                     480
aaatactgta catataaata gtaagactgg gctttgtgtt gtccattgtt aatcctaaat
                                                                     540
gcaacaaaac acatggagac tttgaaaatc cttcagaata atgctatagt taagattttg
                                                                     600
ctaaagcaag tgttttttct aactccttga gctgcatatt gccttgagta atcatcatcc
                                                                     660
ggattgtate etetteggtg geaettttgt ttettetgaa ttettetett geeeaatett
                                                                     720
tcaggtattt gcgatcagaa tcatttggaa cttgccgaat tgtttgcaaa atccttctgt
                                                                     780
agaggagaag aacttgttgc cttcttacga actgctttaa cgttagcgtc gctgggggta
                                                                     840
agegggaage agecatgtee accagageea caggeeggte aatggggeet tegat
                                                                     895
```

```
<210> 3307
<211> 2130
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(1841)
<223> similar to gi5524739 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3307
gggtcgaccc acgcgtccga tggagtgtag gccggccggc gagactgcac ctcccagcat
                                                                       60
gccttgcagc caggactgga gtcggtactt aagagtgatg gggttcccta gatactttag
                                                                      120
gccgtcgcat cgattataga gattgaggtg gaacccgggg cctgggaact ggacgcacgc
                                                                      180
ggagggcgaa gatggaagcc tggcgctgtg tgaggaaggg ctacggccac tgtgtggtgg
                                                                      240
gaagaggccg ataccccatg tttccccatc actcgaggag tctgggcaga gactggacta
                                                                      300
caccgtggga gaatctgcaa aggtgttgct ggaacagaca tatttctagt tgtatgaggt
                                                                      360
ggcctggaca ttactctcga gctccttacc catacttcag tagtaggcat ttttcactaa
                                                                      420 ;
attggagacc accetgtttg tttgagteta gaacteagtt ceagtactgt aactggagac
                                                                      480
ctgacaacct gagccagaca tctttgattc atctctctag ttacgtcatg aacgctgagg
                                                                      540
gagatgagcc ttcatcaaaa cgaagaaaac accaaggtgt gataaagcgg aattgggaat
                                                                      600
atatatgtag ccatgataaa gaaaaaacga agatcctagg agacaaaaat gttgatccca
                                                                      660
aatgtgaaga cagtgagaac aagtttggac ttttcagtga tgtcctataa tatactttca
                                                                      720
caagaattcg gcacgaggat aactctcacc tttatagaca ttgccggcgg ccagtattac
                                                                      780
actggagttt taggtttccc aatatttctg aaaggaattt aaacattttg gtggcagacg
                                                                      840
tactttggtt tgcaagaagt tcaagaagat cattatggag cagagatcag gccaagtttg
                                                                      900
gaatcactgg gttatcactg tgaatataag atgcggacag gaaggaaacc tgatggctgt
                                                                      960
gctatttgct tcaaacattc caaattttca ctcttgtcag tgaacccagt ggaattcttc
                                                                     1020 -
cgccctgata tttctctgtt ggacagagac aatgttggga ttagttttac tcttacagcc
                                                                     1080 -
caaaattcca tatgcttgcc tgccctgcaa tctggcgtag caaattacgg catctgttgt
                                                                     1140
attaatccag ggcgaggtga tattaaggtt gacgcaattg gcaatgctac tggcagagat
                                                                     1200
ttccagtgtt gcccaccaga aagatggcag cttctgccct attgttatgt gtggtgactt
                                                                     1260
taattctgtt cctggttctc cactatatag tttcataaag gaaggaaaat tgaattatga
                                                                     1320
aggacttccc ataggaaagg tatctggcca ggaacagtct tcacggggac aaagaatttt
                                                                     1380
atctattcca atttggcccc caaacctagg tatctcacag aactgtgtgt atgaggtaca
                                                                     1440
gcaggtacca aaagtagaaa agacagacag tgatctgaca caaacacagc tgaagcaaac
                                                                     1500
agaggtccta gtgacagctg aaaaattgtc ttcaaattta cagcaccatt tcagtttgtc
                                                                     1560
atctgtttat tcacattact ttcctgacac tggaattcca gaagtgacca cctgtcattc
                                                                     1620
ccgaagtgcc ataactgtgg attatatttt ctactctgca gaaaaggaag atgttgctgg
                                                                     1680
gcacccagga gctgaagttg ctttggttgg tggcttgaaa cttctagcta gactgtcact
                                                                     1740
tottacagaa caagacttat ggactgttaa tggacttcca aacgaaaata actottcaga
                                                                     1800
tcatctgcct ttattggcaa agttcagact tgagctctga ctctctttga tcacatacta
                                                                     1860
attttctttc caatttgtat tgtttttcaa agaatgtaaa gttcttaagt gtatgcatgt
                                                                     1920
tgtttatttt tgcactgtgg agattctgaa gcggttatgt tagatgcttt gaaactccat
                                                                     1980
atcagaagaa ataactttat aacaattttt tttaataatg aaaaatattt tcctgacaag
                                                                     2040
tgagctctaa attctcttta ttgtaaaaga gatgtaaagg ttttatattc taaatcctag
                                                                     2100
taaaattgac agtgattttt aaaaaaaaaa
                                                                     2130 -
```

```
<211> 3569
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(2856)
<223> similar to gi219944 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3308

agcggccggg gccacgatgg agcgcgacgg ctgcgcgggg ggcgggagcc gcggcggcga 60 gggcgggcgc gctccccggg agggcccggc ggggaacggc cgcgatcggg gccgcagcca 120 cgctgccgag gcgcccgggg acccgcaggc ggccgcgtcc ttgctggccc ctatggacgt 180 99999aggag ccgctggaga aggcggcgcg cgcccgcact gccaaggacc ccaacaccta 240 taaagtactc tegetggtat tgteagtatg tgtgttaaca acaatacttg gttgtatatt 300 tgggttgaaa ccaagctgtg ccaaagaagt taaaagttgc aaaggtcgct gtttcgagag 360 aacatttggg gaactgtcgc tgtgatgctg cctgtgttga gcttgggaaa ctgctgttta 420 ggattaccag gggggacgtg cataggaacc aggaacatat atgggacttg caacaaattc 480 aggtgtgggt gagaaaaggt tgaccagaag cctctgtgcc tgttcagatg actgcaagga 540 ccaggggcga ctgcctgcca tccaacctac agttcctgtg tgtccaaggt gaagaaagt 600 tggggtagaa agaacccatg tgagagccat ttaatggagc ccacagtgcc ccagcagggt 660 ttgaaacgcc ctccctaccc ctccttattt tcctttggat ggattcaggg cagaatattt 720 acacacttgg ggtggacttc ttcctgttat tagcaaacta aaaaaatgtg gaacatatac 1780 taaaaacatg agaceggtat atccaacaaa aacttteeee aatcactaca gcattgteae 840 eggattgtat ceagaatete atggeataat caacaataaa atgtatgate eeaaaatgaa 900 tgcttccttt tcacttaaaa gtaaagagaa atttaatcct gagtggtaca aaggagaacc 960 aatttgggtc acagctaagt atcaaggcct caagtctggc acatttttct ggccaggatc 1020 agatgtggaa attaacggaa ttttcccaga catctataaa atgtataatg gttcagtacc 1080 atttgaagaa aggattttag etgttettea gtggetacag etteetaaag atgaaagace 1140 acacttttac actctgtatt tagaagaacc agattcttca ggtcattcat atggaccagt 1200 cagcagtgaa gtcatcaaag ccttgcagag ggttgatggt atggttggta tgctgatgga 1260 tggtctgaaa gagctgaact tgcacagatg cctgaacctc atccttattt cagatcatgg 1320 catggaacaa ggcagttgta agaaatacat atatctgaat aaatatttgg gggatgttaa 1380 aaatattaaa gttatctatg gacctgcagc tcgattgaga ccctctgatg tcccagataa 1440 1500 gcacttcaaa ccttacctga aacatttctt acctaagcgt ttgcactttg ctaagagtga 1560 tagaattgag cccttgacat tctatttgga ccctcagtgg caacttgcat tgaatccctc 1620 agaaaggaaa tattgtggaa gtggatttca tggctctgac aatgtatttt caaatatgca 1680 agccctcttt gttggctatg gacctggatt caagcatggc attgaggctg acacctttga 1740 aaacattgaa gtctataact taatgtgtga tttactgaat ttgacaccgg ctcctaataa 1800 cggaactcat ggaagtctta accaccttct aaagaatcct gtttatacgc caaagcatcc 1860 caaagaagtg cacccctgg tacagtgccc cttcacaaga aaccccagag ataaccttgg 1920 ctgctcatgt aaccettcga ttttgccgat tgaggatttt caaacacagt tcaatctgac 1980 tgtggcagaa gagaagatta ttaagcatga aactttaccc tatggaagac ctagagttct 2040 ccagaaggaa aacaccatot gtottottto ccagcaccag tttatgagtg gatacagcca 2100 agacatetta atgeceettt ggacateeta taeegtggae agaaatgaea gtttetetae 2160 ggaagacttc tccaactgtc tgtaccagga ctttagaatt cctcttagtc ctgtccataa 2220 atgiticatti tataaaaata acaccaaagt gagttacggg ttcctctccc caccacaact 2280 aaataaaaat tcaagtggaa tatattctga agctttgctt actacaaata tagtgccaat 2340 gtaccagagt tttcaagtta tatggcgcta ctttcatgac accctactgc gaaagtatgc 2400 tgaagaaaga aatggtgtca atgtcgtcag tggtcctgtg tttgactttg attatgatgg 2460 accyttytya ttoottaaga gaatotyagy caaaaaagaa gagtocatoo cytaaccoaa 2520 gaaaattttt ggattcccaa ctccacttcc ttttattggt gctaacaagc tgttaaagat 2580 acateteaga egeetttgea etgtggaaaa eetaggaeae ettaggettt eeattttgee 2640 ttcacaggga ctggattaac agcgagacgt gtggtgcatg gggaagcatg actcctcatg 2700 gggttgaaga attcgttaaa tgtttacaca gagcaccgga tcacaggatg ttgaggcaca 2760 tcacttggac tcagcttcta tcaacaaaga aaagagccag tttcagacat tttaaagttg 2820 aaaacacatt tgccaacctt tagccaagaa gactgatatg ttttttatcc ccaaacacca 2880 tgaatctttt tgagagaacc ttatatttta tatagtcctc tagctacact attgcattgt 2940 tcagaaactg tcgaccagag ttagaacgga gccctcggtg atgcggacat ctcagggaaa 3000 cttgcgtact cagcacagca gtggagagtg ttcctgttga atcttgcaca tatttgaatg 3060 tgtaagcatt gtatacattg atcaagttcg ggggaataaa gacagaccac acctaaaact 3120 gcctttctgc ttctcttaaa ggagaagtag ctgtgaacat tgtctggata ccagatattt 3180

```
gaatettet tactattggt aataaacett gatgggcatt ggggcaaaca gtagacttat 3240 agtagggttg gggtagecca tgttatgtga etatettat gaggaatttt aaagtggtte 3300 tggatatett ttaacttgga gttteattte tttteattgt aateaaaaa aaaaaattaa 3360 geagaageea aaataetttt gagaeettgt tteaatettt getgtatate eeetegaaaa 3420 teeaagttat taatettatg tgttttegtt ttaaattttt tgattgggag tttetttaga 3480 tttaaaaate tteettgta ttegtattt gaggggaega tetttgaata taettaeeta 3540 ttataaaaate ttaetttgta tttgtattt
```

```
<210> 3309
<211> 1052
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(653)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3309
ttttttttt ttgagacgga gtctcgctct gtcgcccagg ctggagtgca gtggcgggat
                                                                       60
ctcggctcac tgcaagctcc gcctcccggg ttcacgccat tctcctgcct cagcctcccg
                                                                      120
agtagctggg actacaggcg cccgccacca cgcccggcta atttttgta tttttagtag
                                                                      180.
agacggggtt tcaccgtgtt agccaggatg gtctcgatct cctgacctcq tqatccqccc
                                                                      240
gcctcggcct cccgcctgcc tcagcctccc aaagtgctgg gattacaggc gtgagccact
                                                                      300
acgcccggcc tttgcttctt tgcataatct cagctgagat ttataattta cttgtgggat
                                                                      360
teteceetet caaactataa gttetgtgaa gacagagatg gtatttttt etecteacte
                                                                      420
tattttttt ttttagacgg agtctggctc tgtcgcccag gctggagggc agtggcgcga
                                                                      480
teteggetea etgeaagete egeeteeegg gtteaegeea tteteetgee teageeteee
                                                                      540
gagtagetgg gactacagge geetgeeace aegeeegget aattititgt attittagta
                                                                      600
gagacggggt ttccccgggt taggcaggac ggtctggatc tcccgacctc gtgatccgcc
                                                                      660
cgcctcggcc tcccaaagtg ctgggattac aggcgtgagc caccgcgccc ggccccctct
                                                                      720
tececaattt tteataeagt tgeedetata caatataeae accettgagg geaggtagaa
                                                                      780
gtccagccca cctgcggcca gggacgctgt ggggaagcat ttttctcctg agttgctaag
                                                                      840
aagaaccetg atgggeggtg ageagaagga ceacaagace agecagggtt ceaggetgge
                                                                      900
ageggataag geeagagaga tegetaggee ceagaaagee eeetaettte agteagggtg
                                                                     960
ggacagaggg cttcgacata aaatggaagc aagccttgag aaggaaccag gagaccttgg
                                                                     1020
agccctaaag ttggggccag ccgggaaatg gg
                                                                     1052
```

```
<210> 3310
<211> 2575
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (2371)...(1792) <223> similar to gi3874338 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3310
ctgcggcccc tgccggttac ataactcgtt gcgggctccg cgcggtccca cttcccggct
                                                                       60
cecttegeet ceaggatgeg etgageeeta caacaceee ageggeegee ggeteeeeea
                                                                      120
cgaggtgtga atgacagagg tggtgccatc cagcgcgctc agcgaggtca gcctgcgcct
                                                                      180
cctctgccac gatgacatag acactgtgaa gcacctgtgt ggcgactggt tccccatcga
                                                                      240
gtacccagac tcatggtatc gtgatatcac atccaacaag aagttctttt cccttgctgc
                                                                      300.
aacctacaga ggtgccattg tgggaatgat agtagctgaa attaagaaca ggaccaaaat
                                                                      360
acataaagag gatggagata ttctagcatc caacttctct gttgacacac aagtcgcgta
                                                                      420
catectaagt ctgggcgtcg tgaaagagtt caggaagcac ggcataggtt ccctcttact
                                                                      480
tgaaagttta aaggatcaca tatcaaccac cgcccaggac cactgcaaag ccatttacct
                                                                      540
gcatgtcctc accaccaaca acacagcaat aaacttctat gaaaacagag acttcaagca
                                                                      600
gcaccactat ctcccctatt actactccat tcgaggggtc ctcaaagatg gcttcaccta
                                                                      660
tgtcctctac atcaacggcg ggcaccctcc ctggacgatt ttggactaca tccagcacct
                                                                      720
gggctctgca ctagccagcc tgagcccctg ctccattccg cacagagtct accgccaggc
                                                                      780
ccacageetg etetgeaget teetgecatg gtegggeate tettecaaga gtggcatega
                                                                      840
gtacageegg accatgtgat gteggetggg cageegeeac caggeeceac cetteggeeg
                                                                      900
cccgcagagc ccgccttcct gtccatctga ccccttctgt tttctgcaag gagctgccag
                                                                      960
ccatctaact gggctcgtcg gcctgcccca gctgcaggcc cggtgctaca cgggctcggg
                                                                     1020
aacagaacat cgtgggcatg cgcagagcat gcccatccgt ggcaggtacg ccacagcaga
                                                                     1080
cacaaagget etteagetee eeteeetget tetggaaaee tetgeetget geeetggeee
                                                                     1140
tgccccctg cgcatgcacc atccccaggg ctgacccagt gtggctgcat tcactgggag
                                                                     1200
gggcctgccc tcactgggcc tctcccactc cgctgcctgt tcttgcagct ccttcctgga
aagctggagg ggactttctc ctgcaaggga ggaacgcaag tattatggac acacttgacc
                                                                     1320
gtaaaggcac aggagcctcg gaacaagggg gcgcaataaa gggaatggcc cgtccccttc
                                                                     1380
cagaaccage ccaaagaage etggggggtg aggagtggee eccaeteete catgagggge
                                                                     1440
tgatgagggg tgggcagcct gggggaggct ttcctcgcaa gcacagagct ctgaggctca
                                                                     1500
geoceetgge acaggeggte acgeateagg acggtteeta etecteagea cetteegtge
                                                                     1560
agttaccagt gccctgggag gtcacactgc ccgtcggacc ttggcatgct ccattcagct
                                                                     1620
gacctgctga ggacaggcat cgccgagact ccttgggtcc tccccgccct ccctcatgct
                                                                     1680
gccacaaget getgetecaa ggeetggeea catgeagaea ggaggaaget gagetegaea
                                                                     1740
ttaggcctca aggctgccat ctgtcttgta gggcctggcc ttgtgggcag ggggcagtcc
                                                                     1800
tgtgccttgt gggccctcag cctctgaggg cagagatgct gtcagtgccg caggtgcatc
                                                                     1860
acatacttct agcatcctct ccaccetgca ttccaaatgc tgcttgctgc ctgccctgcc
                                                                     1920
ctccgatgca ggggtggggt gggggcggag tcccgcccag catagctgca qtgtcacaaa
                                                                     1980
gccatggcag agggtcctag cggcgccacc ctgccccagc ctgaggagga gggagaggga
                                                                     2040
ggaacaacce tgggcagacg gggtctcagg gacctgtgtc cttccgcctc cagagctgcc
                                                                     2100
cagecaeggg eteteagggt getggggeag eeceaggtee eetettgaae teagetgggg
                                                                     2160
ccaggggccc tcagaatgaa ggcaggcacc aggcaggagc agcatccccc tccttgacgg
                                                                     2220
tgctggcagg agggccgcgc catgctgact gcttgaacct ctgctgacct gacagtgctg
                                                                     2280
gegggaggge egeaceatge tgactgeetg aatetetget gaggetgeet geetgeeggg
                                                                     2340
eccageteag egecetetee actgegaate agtggegate atgtgattte tatttetgee
                                                                     2400
ccacagggta agggacgagt cttctggaag gctctgccat ggacatttgt cctcgggctc
                                                                     2460
agaggeeeca eeetgeeeca cacetgeeee taateaetge agtgteeage eeagtgttga
                                                                     2520
acagattgta gcgttctgtc tcattacgag caaataaata gactttcatt ggaaa
                                                                     2575
```

```
<211> 408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (409)...(131)
<223> similar to gill77607 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3311 gcaaattaag acaggagcag ctcctgggag aagcagacac caaacaatac ggctgctggc 60 ccagaggtca aaaaccatgg cctagagggg gcggtcagga agtgggacat taggccgggc 120 gtggtggccc atgcctgcaa tcccagcatc tttggaggcc aaggcaagtg gatcacctga 180 gttcaggagt ttgagaccag cctggccaac atggtgagac ttcgtctcta ctaaaaatac 240 aaaaaaaatt cgctgggct ggtgggggt gcctgtaatc ccagctactc gggaggctga 300 ggcacaagaa tcccttgagc ctggggaggc agaggttgca gtgagccaag atcgcaccac 160 tgcactccag cctgggcaac agagcaagac tccatctcaa aaaaaaaa

```
<210> 3312
<211> 1931
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1774)...(1255)
<223> similar to gi3212854 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3312
ttttttttt ttgggtgttt tattatttat ttacttgaca ggtaacatcg atttggtcct
                                                                       60
acaagacacc atgctatagg cttagctact tgctgttgca caagagaact ttcctgaact
                                                                      120
ctcaggaagc ccttgcatgg cctatcgagg acagctcagt cactgaaggg aaaaattcca
                                                                      180
taccaaagaa gagagaaaaa ttccatacca aagaacagac ttcccccagg gaacctccgt
                                                                      240
cctacagece tteagggeca teacacteae acacateage cateateaaa atagtggeca
                                                                      300
tgctgggaag aacaggagtc ctgaactaga aggtggtctt caaaccatgg cgtaccgatt
                                                                      360
tatgtatatt acagatagat aaattaagag gtctacatga ataaaaaatc tctcaaaggg
                                                                      420
gaacgaattc cattotgtca tgccaggtgt ttgtcagaac cttgaaaacg aaggtggttt
                                                                      480
tcagtggagc ttgtattaaa aatagaaggt atttatacac aggccctgct cctctcatgg
                                                                      540
ccatgaaatc ctctggtgtt gtcaggaccc ctgggcaacc tcagcacccc tacgggtagc
                                                                      600
ccatctgcag tetgcatett eegggagage aggggaeteg tacegggget ttteteetgg
                                                                      660
gtccccatct cggcttggcg acgcctccgg acccaggggc tgccagaggg agtgacgctg
                                                                      720
ctgtcagagg aataatccat acacttgcgg aagatctcag ggctggtgct gcagttcagt
                                                                      780
ctaccttect cegecaging gractitety gaaacgeett tgegitggge caaggggetg
                                                                      840
ctccaaggac ttgtgcacgg ggaggcattt ggactcagaa agagattctg gtggccagac
                                                                      900
gggctgagct tgttggtggc cgcgtgccgt cggcccgcca taggggatgt ggggttgctc
                                                                      960
```

```
teggggteag aggagetgtt ggeagaagae teateaceea tgtaetgaag eteetegaet
                                                                     1020
ctcttgttca gggacttgtt caggtggatg ctcgcagtgg gctcctcgtc atgatttttg
                                                                     1080
tetttggeag gtttettttt gggtggette ataccaatea ggacagettt catgttetet
                                                                     1140
ttgccctgag attctgtgat catgaactca tgggctttga tggctgcttc cacctcctcg
                                                                     1200
aactecaega tggcacaete etgggteece aettggetgt ageggetget gateeteegg
                                                                     1260
atgtcagggg gcagctctct cccaggtttg aggatccgca ctgatgagat gactccaaaa
                                                                     1320
gtcccgaaaa gcttgagcag gtgttccatc accttctctt gcacccttcc attcttctgg
                                                                     1380
ggggtggcca gagcccacag cttaggagac aagtagagat catagcccag gagcatcttg
                                                                     1440
ctggggaggt tctcgttggg gaacagtggg acgggggtgg tcctcctcac cttccggtgg
                                                                     1500
teeteattea acteaaggae caetgaatae tteaaageat gtgetgtggt tetecagtee
                                                                     1560
cgtgtaagat gtttcacctt tttgaaggat gtgagtagct taacgctcac atatcccagc
                                                                     1620
ttgttcctcc tcacgtgttt tagcaaaaag gcgtccttct ccaggttttc atcagaaaag
                                                                     1680
tagaattaaa totggtocao cagtttottg atcaactoot catcoggggg ottocactoo
                                                                     1740
tgctccaggt cctcacgctc gttctcacct ccacttgcag tggtgccact gtgcccgcgg
                                                                     1800
cteggeteet cetegetege getgeeceag ceggggetga ggtaceggge egggteeceg
                                                                     1860
gcgccccgag tctccgcccc aacctcatcg tcctccaact cgtccacgtc ctcggcctct
                                                                     1920
tggcctcgtg c 🧳
                                                                     1931
```

```
<210> 3313
<211> 511
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (24)...(155)
<223> similar to gi1799988 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3313
gaattcgagc tcgcgacccg gagatccgta accgtgagaa gacccatcat tatgcccgaa
                                                                       60
tgggttacac agaatattat gaatggccgc ggcgttaatc gtctggatga tgttaatcgg
                                                                      120
ccaaaaagcc cggaaatcaa gaacgatatt cgtctgttcc gccaggagct gcgtgatgcc
                                                                      180
gettateatt tedagggega tgeegacaac gateagettt etgtaacgee getagtgggg
                                                                      240
ctggggaaat cgagtctgtt gaacaagacc attttccatc ttatgccttg tgccgagcag
                                                                      300
aaactaacca tetgtacgee atactteaac etgecageaa teettgtgeg caatattate
                                                                      360
cagttgctgc gcgaagggaa aaaggtcgaa attattgttg gtgataaaac cgcgaatgcc
                                                                      420
ttctacattc cgtacgatgc gcctaacatg ataatcggca cggtgcttca tctctatacg
                                                                      480
atgtacgggt cgcgacattg aattcgtaat c
                                                                      511
```

```
<210> 3314
<211> 1227
<212> DNA
<213> Homo sapiens
```

<220>

```
<400> 3314
cagttttttt tttttttt tgctgcatga ttttattact ataaatatac agtaaaaacg
                                                                       60
aaccaacgat gagcccatct gagcacatca gacggcagca catgggagtc ccagcgggcc
                                                                      120
actetgegge eegaacttea egeaaagete tggeaceagg actgatggee agaggetggg
                                                                      180
gccttggtgg gggcgggggg cgggcggtgc agggggctgt gtgttgttgtt ggggagaggt
                                                                      240
gcatgggggg agagaggtgc ttggggtggg gtagaggtgc gtgggagatg ctcggtccga
                                                                      300
gtgcacacac atgcatggga acatgtgcag gagtatgtgc gtgtgtgtat gcgtgacagc
                                                                      360
atgtgtgagc gtgagtgtgc atgtgtgaac gtgtgcgtga gcatgtgcaa gtgggcgtgc
                                                                      420
atttgtgtgt gtgtacgtgt gagcgcatct gcgtgcctgt gcacgagcgg gaggggtggc
                                                                      480
tggcctgggt gtgcagggag ctgggtgtga ggaccgtgct gtccactgct gggtctcgcc
                                                                      540
caggaggcag ageteatget eggagecace gtgageetea gggagggtae tgagetgeee
                                                                      600
cacageegae etgteeceag geceecaetg cagggeagee etecagagee aggtgageag
                                                                      660
cagacacett geetggeeca aggeteegea ggggtggate catgecetgg gteaccaegg
                                                                      720
cccaggeact ccctttgcca tetgeggece caggaggttt acctataaaa aaaacaaaca
                                                                      780
aacaaacaaa caaaacagga cgaggtcgcc cagaggccaa gcctccccgg ccgggacccc
                                                                      840
attecceagg tgtgetgetg getteeteet eeetgggeee ageetgeeae agaaageetg
                                                                      900
agacagaaca aaccaaatca gagagaactg caagggggcc gggcgcggag gctcacgcct
                                                                      960
gtaatctcag cactctggga ggccgaggca ggtggatgac cttaggagtt tgagaccagc
                                                                     1020
eeggeeaaca tggtgaaate cettetetae taaaaataca aaaaaattag eegageatge
                                                                     1080
tggtaggcac ctgtaatccc cagctactca ggagcctaag gcaggacgat cacttgaacc
cgggaggcgg aggttgcagt gacccgagat tgagccactg cactccagcc tgggcagcaa
                                                                     1200
gagtgaaact ccatctcaaa aaaaaaa
                                                                     1227
     <210> 3315
     <211> 1504
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1401)...(1143)
     <223> similar to gil872200 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3315
gactteegae gagetgggte ggggaeaegg tgaagagget eeagegggae etgeeeatea
                                                                       60
gtectgggee aggaggget ccaagcagca cccagcggte cgggggagte tcagacccgg
                                                                      120
catgcgtggc tggcagacct gggagagcca gggcagggtt ttgcgttcag agaaggattg
                                                                      180
ccccagagac ccgtggtgga cttcatgggt gctgagtggc ccgtgtgaca gtgatgacac
                                                                      240
gaaggetteg gegtttgagt gggtgeaggt geacgeeagg gettggtget teeetgeetg
                                                                      300
gecetggagg gagetgggtg geetggette aggggaagae aggageeagg acacaegtea
                                                                      360
gcccagcagg tgtggggggt gctgcagccc tcggcagtgg ggtcaggccc tgggggatgt
                                                                      420
```

<223> similar to gi1710216 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<221> misc_feature <222> (13)...(270)

```
ttccaatggt gggcagcctg gccaggccgg agaagacatg ttcacgggca tctatcagat
                                                                      480
gcccccttga ggaggctgag ttatttgagg gctgctgcaa agtacgctag gctcaaattc
                                                                      540
tcttttccca gccagagccc tggccacacg gactcagagg ggccaccggg gtggggaaag
                                                                      600
gacccctccc ccacccccg cagccactgg cctccagctc teggccacag aatggcctct
                                                                      660
aaggctgact cagccgctcc cttgggctgt ggcagcagga ggcgggggct ctggctcagg
                                                                      720
ccccggagcc tgtgcagctt gcccatggcc ctaggcagcg aggggacagc ctgggggact
                                                                      780
tcctgcctag gcaaggtcat tggccgggcc tggcctgtgg atagtggggc caggggccgg
                                                                      840
cccaggccaa atgagtgccc tccttgttat gacaccaagt gactacaagg gaggcaagac
                                                                      900
ecctecagge eteteageeg acaetgggte ceaceacaea cagtgaetgt geegtgeagt
                                                                      960
gcaggttctg gccttttcct tgaaggcatc tggtagaccc gaagccacgc tctcgggccg
                                                                     1020
cacatgcacg ccgcagcacc agctgccctg agctgcttgt acaaccaaac acctttcccc
                                                                     1080
tettetecag etgtaacetg gagagteage catgeettgt ettttgttet cataaatagt
                                                                     1140
cactggggcc gggcgcagtg actcacgcct gtaatcccaq cactttggga ggccqaggtg
                                                                     1200
ggcggatcac ctgaggtcag gagttcaaga ccagcctggc caacatggtg aaaccccgtc
                                                                     1260
tctactaaaa atacaaaaat tagctgggtg tggtggcggg cgcctgtaat cccagctact
                                                                     1320
cgggaggctg aggcaggaga atcgcttgaa cccaggaggt ggaggttgca gtgagccgag
                                                                     1380
atcgcgccac tgcactccag cctgggtgac aagagtgaaa ttctgtctca aaaaataaat
                                                                     1440
acataaataa ctaagactca gagagtacag tcaagatatt aatagtcaaa agttgtcgca
                                                                     1500
acaq
                                                                     1504
```

```
<210> 3316
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (419)...(143)
<223> similar to gi1872200 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3316
cagteettgt teececagga agggetggtg ggeeceagea caeaettggg attatgtgta
                                                                       60
tacataaata aatattgggc tgtttccctc ttcctgtgaa gtggttctca aattcctatg
                                                                      120
tactgtaaag ctgtaccctt aaaagtacag atgtggccgg gcacagtggc tcacgcctgt
                                                                      180
aatcccagca ctttgggagg ctgaggcggg tggatcactt gaggtcagga gttcaagacc
                                                                      240
agcctggcca acatggtgaa acctcgtctc cgctagaaat acaaaaatta qccaggcqtq
                                                                      300
gtggcgggca cctgtaatct cagctactcg agaggctgag gcaggagaat ctcttgaacc
                                                                      360
tgggaggtgg agattgcagt gagccgaggt cgtgccattg cactccagcc tggacatcaa
                                                                      420
agtgagactc aggccaaaaa aaaaa
                                                                      445
```

```
<210> 3317
<211> 1198
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (174)...(803)
<223> similar to gi3169037 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3317
aaaatctttc ctctaaagtc aaactgttgc agttgtattc agaggccagt gtagcgcttc
                                                                       60
taaaactgaa taaccccaag gattttcaag aattgaataa gcaaactaag aagaacatga
                                                                      120
ccattgatgg aaaagaactg accataagtc ctgcatattt attatgggat ctgagcgcca
                                                                      180
tcagccagtc taagcaggat gaagacatct ctgccagtcg ttttgaagat aacgaagaac
                                                                      240
tgaggtactc attgcgatct atcgagaggc atgcaccatg ggttcggaat attttcattg
                                                                      300
tcaccaacgg gcagattcca tcctggctga accttgacaa tcctcgagtg acaatagtaa
                                                                      .360
cacaccagga tgtttttcga aatttgagcc acttgcctac ctttagttca cctgctattg
                                                                      420
aaagtcacat tcatcgcatc gaagggctgt cccagaagtt tatttaccta aatgatgatg
                                                                      480
tcatgtttgg gaaggatgtc tggccagatg atttttacag tcactccaaa ggccagaagg
                                                                      540
tttatttgac atggcctgtg ccaaactgtg ccgagggctg cccaggttcc tggattaagg
                                                                      600
atggctattg tgacaaggct tgtaataatt caccctgcga ttggggatggt ggggattgct
                                                                      660
ctggaaacag tggagggagt cgctatattg caggaggtgg aggtactggg agtattggag
                                                                      720
ttggacagcc ctggcagttt ggtggaggaa taaacagtgt ctcttactgt aatcagggat
                                                                      780
gtgcgaattc ctggctcgct gataagttct gtgaccaagc atgcaatgtc ttgtcctgtg
                                                                      840
ggtttgatgc tggcgactgt gggcaaggta tgtttactgc caaacaaata agaatgggag
                                                                      900
cataaaacat ccttgacagg tagagagagt tttgaatggc ttttgttatt taaaataatg
                                                                      960
attetetgtg tatecettta ecageettge atteaaacta gttatgaaag taagagaaca
                                                                     1020
acataaatca ctgaagagga tetttteetg ttattgttge agtetggtgt tttgtttgt
                                                                     1080
tttgttttgt ttggaccaag cagatttacc ttagctgaaa atatgtggtg aagttttaat
                                                                     1140
ttggaaacaa aaaaggatat caataattca ttaaataaag atggttcaaa cactggaa
                                                                     1198
```

```
<210> 3318
<211> 1031
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(668)
<223> similar to gi1321816 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3318
ctactactgg cctgccgcag catggactgt tacctggcca ttgtccatgc cacacgcaca 60
ctgacccagc agcgccactt ggtcaagttc atatgtctgg gtttgaggaa cctgttcctg 120
ttactgtccc tacgcatctt gcttttccga aggaccttct acccatccaa tgttagccca 180
gtctgctatg aggacatggg caacaataca gcaaactggt ggatgctgtt acggatcctg 240
ccccagtcct ttggcttcat cgtgccgctg cgatcatgct gtctgctac agattcaccc 300
tgcatacgct gtttaaggcc catatggggc agaagcactg gaccatgtgg gtcatctttg 360
ctgatgccct cattttcctg ctctgctgc tggcctacaa cctggacctg ctggcagaca 420
```

```
ccctcatggg aacccagatg accaatgaga cctgtgagcg ccgcaacgac atcaaccagg
                                                                      480
ecctggatge cactgagatt ctgggcatce tteacageta ceteaateee etcatetacg
                                                                      540
ccttcattgg ccagaagttt tgccatggac ttctcaagat tatagccata catggcttga
                                                                      600
tcagcaagga ctccctgccc aaagacagca ggccttcctt tgttggctct tcttcagggc
                                                                      660
acacttecae tactetetaa gacetettge etaagtgeag accegtgggg tteeteeett
                                                                      720
ctcttcacag tcacattcca agcctcatgt ccactagetc ttcttggtct cagtgtcagt
                                                                      780
gcagccccca ctgtggtcgc aggaagcaga ggaggccacg ttcttactag tttcccttgc
                                                                      840
atgatttaga aagcetgeee tggtaeetea eeeettgeea taattaetae ateaettget
                                                                      900
ggagetetgt ceeteetgee ettgagetea tggeaeteta tgttetaaga agtgaaaate
                                                                      960
tacactccag tgagacaget etgeatacte attaggatgg ttaatgtcag aagaaagaaa
                                                                     1020
atcataaaat a
                                                                     1031
```

```
<210> 3319
<211> 2416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2417)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2383)...(2122)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3319
tttttttttt tttttttca caagttatat tttattttaa cacgaggatt aacatatagt
                                                                       60
tacaaggtca atacaagcet ccagtggaag etetttattt ggtttaatte catetecaga
                                                                      120
gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc
                                                                      180
ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
                                                                      240
gttaaaatag aattctggac ctttttaaaa agtttttgga tgatataagc acaggaggca
                                                                      300
gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
                                                                      360
tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct
                                                                      420
ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc
                                                                      480
cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg
                                                                      540
aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc
                                                                      600
aggttetttt aaaattagte atettacaae acaacagtat tetageaegg tggegaagtg
                                                                      660
acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta
                                                                      720
tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga
                                                                      780
tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc
                                                                      840
atggagecae geagaetgge eeggaageaa caeeeaggtt caacatttaa gageaetege
                                                                      900
tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac
                                                                      960
ggggggatac aagcatatec tatactgggg gtgacggtca ttcaaagagc aaattactgc
                                                                     1020
agettatate tittecaeta tgitgeaaga aatgaateta teetgaeeca taatatgaaa
                                                                     1080
gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat
                                                                     1140
cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaagatccc
                                                                     1200
tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat
                                                                     1260
```

```
gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tgtgtcatcc
                                                                     1320
gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt
                                                                     1380
aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctga gcggtttgca
                                                                     1440
gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                     1500 -
gccacttcct cttcacctgc ctgggcctca gcgtctctgc gcttgtggtt tctcgtcccc
                                                                     1560
gagggetgae tgagetgete eggaagggtg gtgtgtggte aacettggtt ggetgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                     1680
tecetgteec titggettet ataggaette ettgtettag atteataaac agcaagagga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                     1800
gacatcatcc ccaggettee gtggegetet eggteacagg agetttagge caatggttee
                                                                     1860
tettgaetgt ttttgeecca aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
99999999t ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<210> 3320
<211> 5020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5021)...(902)
<223> similar to gi4589538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3320
aatatcccat ggcttacctt ttatttttt attataaaaa cacatacaag agttttaaga
                                                                       60
aataacgaat ataagacaaa tcaaaaccat ggtgagttat taaacccatt ttctatatac
                                                                      120
aaatactaaa attcccaaag tggaatatca tccaatgtga gacacatcat agcacggtcc
                                                                      180
atatgtacac ggcacacaga gctctgcctg cgctcatctg tgaattgctc attacatgtc
                                                                      240
actgataaaa aaatetgeaa gggaaettet actetteagt teteetette etgatgeatt
                                                                      300
gtcacatatt tttaaggaac tttagggata tgaagaaaat gcattaaagt gggtttctgc
                                                                      360
taagggetet geatgittig eteigateaa tiaegeaeta eateitgaga aaaaettiig
                                                                      420
caactcattt ccagcaaaga tagcagaaaa ctctaggttt ttgccaattt atttttcct
                                                                      480
agtcactcat tggaacacaa gtccaacaac aacagctcag gaaccaaatc atgtttttat
                                                                      540
attigtaagt teattataaa atgeeaetea attitaagaa geeaetaaaa ggaeaettte
                                                                      600
tgcagcaaaa aaagggctaa gttcaagttt ttgttgtttg acaaagacac aataatataa
                                                                      660
cccatatgtc acagatcaca acageettaa gtgaaaegta ttagatttag ggaaaaaega
                                                                      720
ctatgcgact gcttgtttct cctgtctcct tgccaaacaa taaggagagc ctctggtctg
                                                                      780
ttttatctat tttatgtctt tttgttttga aacctccctt tgtattctga aagctgatca
                                                                      840
aactatttgt gttcaaaatg tgtcaaggca cttctcaagc ctcagtggca tcccaggtca
                                                                      900
gccaagctcc tetgtgctca gggcactgac ttcctctagg cagctgacaa tcgcagacgg
                                                                      960
aacgcttttg gaggcctctc tccgccaagc ttccaggatc ttggaaattt ctgctggatt
                                                                     1020
```

```
gctgggactc aagtcacaaa gagcatacac ggctgctaac tgtatacccc atggtatatc
                                                                     1080
ttcatcgtga gcatgctgta taaacatacc aataaccgaa ctaatattt tcacagcaga
                                                                     1140
tggaaateet tettteaaac eeaattggee taaacgaeea ateageetea gtattgagge
                                                                     1200
tataataata teaggagtat aegeaatgtt tgeatgteet tttetgtatt ttateeattt
                                                                     1260
atccatcaca ggccacaget cettaettat gatgttatca tgcgtccaga tecatttetg
                                                                     1320
atggcagcag agcagatcaa tggcaaatat gtattcccaa gtgttatcac ttaggtcttc
                                                                     1380
accaaatttt tcactaggtt gaaattctgt ttttggacat aactgtatgg tcaaaagcag
                                                                     1440
cttagaaacc atgaagccaa catctaccgg ggcattcttt tcccaattaa gaaaagctct
                                                                     1500
caagcagttc agaacctctc ctttagcacg ttgcctggca actaactgca ttgctttatt
                                                                     1560
aatcaccgat tgagagagaa atatatcatg ccacatgttt gcaataaaca aagttaattt
                                                                     1620
ttcagactcc ggaaaatctt cttttaagta ggctgtagca aaacaaacga gctctttcca
                                                                     1680
agtotocgag ttgccgacaa atacccacat acaccctgca gagggcgtga atgtaattgt
                                                                     1740
ggtccataga tatcttctga atttttagtt ctgagagaat agagtgaagc aagcactctg
                                                                     1800
ctaaatgctt ttttgttgtg ctaaattcat aaacaacttc cttctcttga tctctcatta
                                                                     1860
cgggcttttt ggagatattt cccacataca catgactacg aatgacaggt aacagatcaa
                                                                     1920
aagaaaactc tgcaattttc ttcagggcat tagctatggc tttatcatgg gactccacag
                                                                     1980
tttcttttgg gcttaaaggc aactgtgaaa ctgcactgac ggctggacta gaacaacttc
                                                                     2040
tttcctcatt tgttgttgca acttcagctg gagggaggtt ccctgggagg tttttgtgga
                                                                     2100
tteettetge agtgaeteee etggtttetg gttetgggga eecagtgtee aggegeagte
                                                                     2160
ttttagcact tctcagtgta gacgttgaca gtgttctttt cccgcttgaa tcctgctgag
                                                                     2220
tecceaaate tettgacttg tettggttae agteaceace agagetgete ceagttttga
                                                                     2280
caaaagcagt tgctgctgaa gtgatcgttt tgaatcctat catagcactg gcaggtcccg
                                                                     2340
gtaaattett acagteagea ggeggaeete gtgtgagttg aatatteeet ttgaggatgt
                                                                     2400
tgagggtccg ggccctggca gataactctg gatacatggt gtcaaggatt ttcacagaat
                                                                     2460
teteetgagg eeeteeeaca geagegtgge cagatgeaca gggtgggagt eggeeaggea
                                                                     2520
caggaagtgc gtgcttcggc gtggccgcac agaactgcag aggagacggc actaccctct
                                                                     2580
cactggctga agctgcagat ggagatggag aaggatctgg aggagaggca cgtctggggt
                                                                     2640
cctctggcca tggagacatg gcaggaggca ctggggtttc acggaaggga gaaacctggc
                                                                     2700
caacaggaga ggctggtgag gaaggactag aactcgatat cagtggagac agtggctgtg
                                                                     2760
aagteettgg aggtgtaget atcagaggag caagcagagg eggcaaagga ggeeceaeet
                                                                     2820
cttgccgtat tttactcagt gtgtcaggag aacaatctgt aggagtggat gtatcagcat
                                                                     2880
ttgctaaaat ggtctgagtt tggcttcttt gagtttttgt attagctttt tcccctgaaa
                                                                     2940
atgactgage aacttcacte tgatgagttt caactetget egacgetgaa gtttttactg
                                                                     3000
gtttgtttga ctgatctttg tttgaaatct ttgatcgatt cttatttttg ccagatggct
                                                                     3060
ctagttttga gttataatat gtgtgatcag acgcaacaat ctgagtctcg aagttttgat
                                                                     3120
catagatttg agaactaatc catatactag gcttaacggg tctatttcgc aaacgactct
                                                                     3180
tatcaaagtt ggtgctctga ccactgcttg aaacatcctc ttggggacat gaaagattat
                                                                     3240
tgccacatgg agcctcctga aatgcagggc cagtgtgact ggcctctggg gacttctcag
                                                                     3300
cagaagtcac tgggatgcaa ccagcttcca gctctccttg atcctgagaa atagggatgt
                                                                     3360
ctccaggaat gtcacacagt gtgacctggt ccacatgtgg caagacagct acaccactga
                                                                     3420
tgattgtcca gttgtccccc ttttcaatga ctagattctg atccttattt ataagtacgt
                                                                     3480
ttataacttc tgaggtcact gttgctatct gacactgaaa tgttgtttcg gcctcgcagt
                                                                     3540
tagaactttg ctctatggat ggctccatca cagagtcaga gcacaaggct gatggctcca
                                                                     3600
caggttctgg caggtcttct tccccaccat cggtttgcct gcctgcatct gaacgggcct
                                                                     3660
ctggtctgct ctgagggttt tcattctgag gcataccgct gatgggagag ctgccctcag
                                                                     3720
tgtccaaggc agctgcttgt ggggttggtt ctgaagcatg tgatgaggag ccagtcgttt
                                                                     3780
cccgaaatgg acttttctct tttaaattct cagtggtcat gttgttattt acatttaaga
                                                                     3840
gcaataaact gccagtatct ttaccattgc aatcttcaga atttgtttga agttcttgcc
                                                                     3900
taatcttggt cagaacctca gacagagttt ccaaagaaca ctgagtgagc tgacttgtat
                                                                     3960
tttttaacga ataatcatct tcctctgatt caatccactc ttcacaggtt ccaagtgttt
                                                                     4020
cttcctcaca gggttgcttt ctgtattttt ctcctatttc acttgccttt aattctttgt
                                                                     4080
tcatttcttt acttagggtt cctttactag aacattcaga aacagagtcc cctgaactat
                                                                     4140
aatcccctaa ctgacagete teaagaaaca teacaacete tgatgtggaa agtetateca
                                                                     4200
gctcagaaaa agtacttatg ttaaaatctt gcagagctga cgtcaaataa cctacctcta
                                                                     4260
aggaaggtct cacctcggct acagcagcat ctgtgtctcc taaatttttc tgtgagtcat
                                                                     4320
caggageate ttgetgtteg etceceteae tgeagetaaa tgeeteaete tetaeeteag
                                                                     4380
tgtcgtctcc cccctctcga atgcctgtgt aacaatgtaa ggtaccaggc aggctacttt
                                                                     4440
```

```
999aggtate etgtgtetet ceatgtttte tgeaaaatge tgaagaaaaa gtagtgtetg
                                                                     4500
tggtgccaaa acactcaggc aaagcaccac cgggagttgt agatttcaat ttccaaagtc
                                                                     4560
cattageatt ttgtggtgtg etggtagaat catttqcaac agccaqqqcc tcaccaccaq
                                                                     4620
atctccctgt gtctccacag ctggtttctt caacagaaaa ccctcctgac acagtcactt
                                                                     4680
ctgtggctgg aagcatctca ctgccatgtg tcccactgga gtccagatct gtggcctgag
                                                                     4740
getgeetttg ettetgeeca tetecetgea etgeagette teteacaatg tettggtttt
                                                                     4800
ggatgaggat attttcagga gagaaagata atctgctatt tgtggaacaa tcagaatttt
                                                                     4860
ctactggtga agaaccacct ggagaattaa aatctaattt tctcctagag gcagaaactt
                                                                     4920
ctggtgaaat gcttttcaca gcagccacct ccgtgatgtt ttgtgttgta tcatctcttt
                                                                     4980
ccccatcaca ttttgctata gttgacatac cggttttgtt
                                                                     5020
```

```
<210> 3321
<211> 1540
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1495)...(959)
<223> similar to gi929619 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3321 60 tatgtettea eteactgttg eccattteea ttttettaaa etttttgaa acaaaaata 120 aaatcacaaa gttcaattca acatgcagat ttcaaagaaa agggagcttt ctagaaactg 180 agctgaaggg gtactgtggg ggatgggtac tgttgtcaga acctcaaatt cttgctgggg 240 cagtttgtga caagaggcag ggatgctgga atgacaggta gaggtgagaa caaagctgcg 300 tgtgtgcaga tgtgtgtgct gagggcaggg gatggggacg gcggccacaa agggctgtca 360 gcagctaggg tgcccgtgag aggtaggacc acctcaggca tgggcagagc tggcaggaca 420 gcaagaaatc tagacggact ctctgccctt gtgtggagaa aagcccttcc cttccctcca 480 atgictetae ceagteetee aacageagee tacagggeee ceagteetag gggaaagtee 540 gggagtetac agteteegtt caagtteaag taacetgagg caegetetet tetagaaggt 600 geettecaca tetetetet etegeagaag etgecageag etcegtecag agattetgga 660 gcagagactg ctgcctggag gtcacagatg aatcttgggg tggccgatgc tccagccaac 720 ttggggtgca aaaaagacat gagcgctcct cttctcggga gcaagtagac acaqqtqcca 780 gggtcaggaa gatgatgcta cagccccaag tcctacgcca gccttccagc ccggaaggct 840 catgtgtgca ggetettgae eccagtgett gecettaece cageaacgeg gegeggecag 900 aaccagaatg caataaatag aggcagggcc aggaggcgga gggccgggat ggtgctagct 960 1020 acctgagtet teetetteet caacgaeetg tgtetetagt ggaactggtt etteettggt 1080 gagggtagga ggttcatcag caacttccga ggagggcagg gagggctcct ccaggatctc 1140 ctggcccage gttggggget gggagtcate egtgeggaag teggaggtgt gtgetqqqet 1200 cagggactca ctctgctggg ggctggggct tgagttggtg ctgctgtcca ccttaagctg 1260 atagacgica gacacggaac iciggitgci gitticgicc iggaaticaa gaaggagaga 1320 ggaattggct gaggcatcag aaggaaagcc attaggttct cgggctgctg aactgttcga 1380 ttttgacttt tctttctcct tgctgtctgt cacaggaacc cacttaaata tcctcaggga 1440 cgtgtcaccc acagtcaccc acttcttctc cccaacttca acgcctgaat acgcagagcg 1500 ctcagcctgg cgaactgaca ccactccagg gctactcgct 1540

```
<210> 3322
<211> 1421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1401)...(393)
<223> similar to gi214868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3322
ttttttttt ttggaaatat attattcatc tattttatat taacttttaa ttttttaatt
                                                                    60
aaatttttaa tagaatattc agggaggggt tottccaagg tgccactcaa acaaaatcca
                                                                   120
agcaggttca tcataagacg aaaaaggtac actctcagat tggtttaaac ctcctaactt
                                                                   180
aaaggacaag gaaggatetg gtttttgtet tttggaaace catgagetat etaettgtte
                                                                   240
tttacttcag ccaattagaa gttcaactga agatagctat tgaacatcat cttaatgatg
                                                                   300
ttataaacag gcaatttaaa tattttattt tgcataatcc ccaagctggg ttatcacaga
                                                                   360
gaaagcatct gagcttctcc cagctcgcca acctgcctgg cattccgtag ctactagcca
                                                                   420
gtcctgtttt ctttccacaa agaaaacaat gatttgttgt tttcttcttt gtctggaaga
                                                                   480
ggggcttttc acaggtggga ggtgatgagt agtacattct ccaaaaaaac tcctgtatgt
                                                                   540
tctaactggg gagaacattt tcctaaagtt ttcttccatg aaaatgctgg aggtttgtag
                                                                   600
acageceagt tecagagete tgaageetge etgeceeaeg tgtgetetgt aatetattte
                                                                   660
tgcttgtgct cccggccagt gaggcaagaa aactgatatt atttacacaa ccaacaggct
                                                                   720
ctttgggaag ccttgttagt catttctgtg atatcccgag cctcaacttt ggaaataaca
                                                                   780
tcagatettt teccaagtga atcaacttta acaeettgaa agcaagtagt eetagagaaa
                                                                   840
gaagaatcag ttatgttttg aacatccagt gactgagaag aagaaggctg tagcttccca
                                                                   900
aactcaaaac atttggactg tctctctggt ttcaccagag aattatgtag cgacattggt
                                                                   960
gcagaacagc gaagaggtga caagagtcta ttcttgtgag gacttaattc ccggtagtta
                                                                  1020
agaactgaag tetetactga ttecceatte ageacteetg caacatgett gagatgetge
                                                                  1080
totggagott toaaccottt gtoagcatta gtgagtagca actocagatt cactttgcac
                                                                  1140
gcaccttcta agccgctgct ctgttcatca gcatttcctt ctgcaaatga agccagtgag
                                                                  1200
cccactttag gtagaagtga ttgttcggtt acacattctt ctgaaggtaa gacaatgttc
1320
agatggagaa cagagtcagc aagctcctgg tcatttccca actccaaatg gggtatctga
                                                                  1380
ggaggtagtt tgacgttgct actgaagtga gacagtgtgt c
                                                                  1421
```

```
<210> 3323

<211> 2351

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2352)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (2)...(1461)
<223> similar to gi5708210 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3323
aatggeetet getgeetetg tgaceageet ggeagatgaa gteaactgee eccatetgte
                                                                       60
agggtaccct gaaggaagec gggteactat cgaactgegg cecaaaaact tetgeeggge
                                                                      120
ctgccttacc ccgctactgt gagataccca ggcccagacc ctggaggagt ccccctactt
                                                                      180
geoccaetet geaaagaace etteegteee tgggagette eggeecaaet ggeagetgge
                                                                      240
taacgtggtg gagaacattg agcgcctcca gctggtgtcc acactgggtt tgggagagga
                                                                      300
ggatgtctgc caagagcacg gagagaagat ctacttcttc tgtgaggatg atgagatgca
                                                                      360
gttgtgcgtg gtgtgccggg aggctgggga gcacgctacc cacaccatgc gcttcctgga
                                                                      420
ggatgcagcg ggctccctat agggaacaaa tccataagtg tcttaaatgt ctaataaaag
                                                                      480
agagagagga gattcaagaa atccagtcaa gagaaaataa aaggatgcaa gtcctcctga
                                                                      540
ctcaggtgtc caccaagaga caacaggtga tttctgagtt cgcacacctg aggaagtttc
                                                                      600
tagaggaaca gcagagcatc ctcttagcac aattggagag ccaggatggg gacatcttga
                                                                      660
ggcaacggga tgaatttgat ttgctggttg ctggggagat ctgccggttt agtgctctta
                                                                      720
ttgaagaact ggaggagaag aatgagaggc cagcaaggga gctcctgacg gacatcagaa
                                                                      780
gcactetaat aagatgtgaa accagaaagt geeggaaace ggtggetgtg tegeeagage
                                                                      840
tgggccagag gattcgggac tttccccagc aggccctccc gctgcagagg gagatgaaga
                                                                      900
tgtttctgga aaaactatgc tttgagttgg actatgagcc agctcacatt tctctagacc
                                                                      960
ctcagacttc ccaccccaag ctcctcttgt ccgaggacca ccagcgagct cagttctcct
                                                                     1020
acaaatggca gaactcacca gacaaccccc aacgttttga ccgggccacc tgtgttctgg
                                                                     1080
cccacactgg catcacaggg gggagacaca cgtgggtggt gagtatagac ctggcccatg
                                                                     1140
ggggcagctg caccgtgggc gtggtgagcg aagatgtgca gcggaagggg gagcttcggc
                                                                     1200
tgcggccaga ggagggggtg tgggctgtga ggctggcttg gggcttcgtc tcggctctgg
                                                                     1260
gctccttccc ccacacggct gaccctgaag gagcagcccc ggcaggtgag ggtgtctctt
                                                                     1320
gactatgagg tgggctgggt gaccttcacc aacgctgtca cccgagagcc catctacacc
                                                                     1380
ttcactgcct ccttcactag gaaggtcatt cccttctttg ggctctgggg ccgagggtcc
                                                                     1440
agtiticiscs tgageteetg agaaggagea gttacetact etectetaag tacaggacte
                                                                     1500
atatcaaccc aagtaccatg tggacttgat ccctggctga atcacctgga tgacttggaa
                                                                     1560
tagaaatgac tgctttagaa gatgggatgg ggccgggtgg taagggatag aagagaggac
                                                                     1620
tetcaateta etgateaagt eettteecca atgeccagtg gatggecagg gtacetgggg
                                                                     1680
actcaggctg ctgccagttc tgctcaccac catccgtgct tggcacagaa gtagctgcat
                                                                     1740
agaaagagca ctggatttga agtcagaaga cctgggttct tgaaccagcc tgtcaaccag
                                                                     1800
ttgtatgact ttaaacaagg catctcacct cttttcatct tgttttcttc caataatgtt
                                                                     1860
agagttcatg taatcacatt ctctagaacc atttagtttg tgttaactat gaaccaagca
                                                                     1920
gtgtggtggc cactggtgac ttgaaaatat agagaaaaaa aaaacctgct ctatatctga
                                                                     1980
aagagctctt gggaagacag agaaacataa agaggaaatt acagcacagt gtggtgggtg
                                                                     2040
ttacgggaag tccaacccca gcattatggg agtttaggga aaggggcata gcccagcctg
                                                                     2100
gaaggagagg gtgagtgggg gatggctttc tgaaaagggt ggtctaaagg atgcctatgg
                                                                     2160
tcaatagggg aaagagggg agaagcatct taagaagagg aaacagcaga gnactggctg
                                                                     2220
gatgacctgt gactttggag cactgggttg tctccattgt cattatgggc agatgtgtgc
                                                                     2280
catececage egacgecact caetgeetet tteeteetgg tgttgecact tetgggtgag
                                                                     2340
attaaggtgc a
                                                                     2351
```

```
<211> 1828
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1506)...(248)
<223> similar to gi3873743 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3324
aaaaactcaa gaccaccaaa tggcgtcttt atttacatat tagagcgggt cagccaagga
                                                                       60
aaateetgea caaateettg tattacagtt geateteeet etteeteaga ettgeeatge
                                                                      120
ttcctctttc ctcttgctac agagectgtt gcacatctct tccctctccc ctttgccgag
                                                                      180
ttagtctctg cttatccttc tggatctccg tttaagaatc acctccgaga agccttccct
                                                                      240
ggggccttcc cgtgtggctt gtggctcaat catgatgttg ataagagaag gtttagttgt
                                                                      300
gtctgcctag gctctgcctc agggattttt ggagttcttc tggtgtttgt acaaaatacc
                                                                      360
ctttgcctcc aaatgcagtc atgacttgct cataatgtga atttggcagc aaacacattg
                                                                      420
gagggaccac tgcagtagca tcttgaaatt ttaacatttc tttccaagta tctgtatcaa
                                                                      480
aaccttggta aattccattg ttattcacta ccaacagtat gattggcaag ttgtacctgc
                                                                      540
agatggtttc tacctccatg ccagaaaacc caaatgcact gtctccttcc acacagatga
                                                                      600
tocattgocc agggetteta tetttageca ccaeggeage tgeaatagea aateccaaac
                                                                      660
caactcccat tgttccgaaa gtaccagcat caagcctgtg acgaggaagg tagttctgaa
                                                                      720
gcacagteeg tecaatgtee atagtatttg etcetteact taccacgaaa cagtetetag
                                                                      780
gtagttgttc ttgaacatgg tagaatactg tgtaataatt cataggcagg gatttttag
                                                                      840
aagctagttc cttggatgca gcttcattgc tcttcatttt ttctctcaga gttttccacc
                                                                      900
acttgetete tggaggatae tgecatggtg ttttateaag tteetetaaa agetgettag
                                                                      960
tgacagcatg tatgtttcct agcaaagtaa cagcgggctt tacattattc cccaattctt
                                                                     1020
ctgcacagat atcaacctaa aaaagagaca aggctggata aacttcacat ctggctgata
                                                                     1080
tettggagge agtecaaaat gtaaaateca atttagtetg geaccaaata acacaattae
                                                                     1140
atcagcaaat tgcaaagccc tggatctggc tgcacctaca cagtatggat ggttgtcagg
                                                                     1200
gacaacaccc ttccccatag gggtgggcaa aaatggcagt ttatattgct ccaccaattt
                                                                     1260
cttgatactc tettetgeat gagegtaage ageacettte eegatgataa gaaggggttg
                                                                     1320
tttggcattc ctaataacag aagccgccgt gcacacagca gaggtttctg ccatgctaat
                                                                     1380
aggaggtgac atgcagcgtt ccatgtactt tatagaattc acattcacct gaaggttcac
                                                                     1440
aaaatetget ggtatgteaa catageaage acetggaega ceatagatae tgetteteae
                                                                     1500
tgcctacgtt cattacaagt agaagaaaag atttgtaaaa tctcagtctt atcatattct
                                                                     1560
actcaaagat aatttaaaac tggaaaatga acacttttca tttttctgga catccttgtg
                                                                     1620
gagaaaaaaa taattatgat gaaaatcgaa atgtcctcta ttgactacat ttttaaagat
                                                                     1680
tttttgttta aaagggagag agataagaaa gtattcattt agggctttaa aattcatgtt
                                                                     1740
ctattacact tragertggg aaattattca coeggetetg cetgecaagt trttgeactg
                                                                     1800
taatatgtac tttcatctgc ttcctaat
                                                                     1828
```

```
<210> 3325
<211> 832
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (609)...(417)
<223> similar to gi3510234 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3325 teettetatg ettattegga ggggeggeaa ggeatgttte eeagttttta agatettgee 60 ccccccata atttatgagg accgttctgt gtccgggcat cagtgatggt gcccctgcat 120 ttcggggtgc tctttggagg gcgtgtttgt tgaaaaacca ccccaaccc cctgcccgcc 180 ggtcccggac ctggccacca tggaaggtgc tgcggatggt ggatccgcgt gccaqqcqqc 240 teegeteece tgatgggggt gecaggetgt gaetggaggg ggaggeaggg ggcaecegtg 300 gggtgcctga gctgttttct ttcccatttg gcaacagtga cgggcgctca gcccccgggc 360 gttctgtgca aacgtaggtg ttcctgcggg tcatcatgct aggagggagg ttgttggggg 420 tgctcgtgct gtccttccgc cgctctggga tctctgcctt gttggggttg tgggcgctgc 480 tgaccatggg gctgaagggg gggcagccct cgactcccac tccccgcggt gctgcagctc 540 geetteegge etggeageeg etecteette ageteegeet eeceegtget egtegggetg 600 cgtttggggt gcaggggtgc agggggttgg ccacctgggg gagggggtac cgtttagagc 660 tggcatcacc acggaaaccc agaactgact ctggggggatc gttggaacct gagaattcct 720 cacgtgggtt gcaatctctg tgtgggccat tctgacaata tctgtcaaaa ttacctcaag 780 attaccaacg cacatatact gacttagaaa ctccaaatca atgacatcat gc 832

```
<210> 3326
<211> 5866
<212> DNA
```

<213> Homo sapiens

<220>
<221> misc_feature

<222> (5867)...(3480)

<223> similar to gi4098628 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3326
60
ataaacacaa aaaagcaaat atcaactgaa aggtttggtt gggtagtcaa ctaattttgt
                                                                 120
tetttetag ggcaatteaa gaaggtaaca tttgaaaggt ttetaaatga tgcacactgt
                                                                 180
aatcattcat tetttttaa aatacaacae aaaccaacag etacaatget ttttatttt
                                                                 240
aacaaaaagg atgtaaggag ggtaagaaaa acagaggaca gtaagatagg atgtaaagtg
                                                                 300
tgatgtatct ctggacacca tecetetetg cetgeeceae acceaaaaqt tttaaataat
                                                                 360
ttaaaggata ccaattacag taccagaaca ccatcaaaat aattgtcttt atcagggtca
                                                                 420
aaaaatacag tgattatgaa tgagctgtga ccagttacga aattttactg gaaatgttta
                                                                 480
actgtggtca gcagtccaat ggtgtgcaca gtgccttcaa ttaatgcact tqaqcatacq
                                                                 540
taattacatt totggcaggg tocacacoco ccaagaaaag gtaaagctaa gcatttcatt
                                                                 600
tctacattct aaactctgga atcacagagc ccagtttaaa agaaaagtca cagtggataa
                                                                 660
gagatgtata taaaaaatac aaggtgtttt tttcaaatca ggagttgtgg gactaccatt
                                                                 720
ctttttttt tttttctttc ttttcttaca aaatgcgatt ttagaaaagg atagagactc
                                                                 780
cagttcatgt tatactacag acttagacag tgaataagta tattgcatgt tttggtagtc
                                                                 840
agtetteagg etteetttea ttteecetag eeceaggttt etttagggta aageatgtga
                                                                 900
```

```
gtcctgaata aagatacaaa aatgcatttg cagctctttt cttgaattct gcagacttca
                                                                      960
aagcctgcaa gtcatatatt ccatcatcaa tgaccacaat ttttctttag ctttgtacac
                                                                     1020
ctattettgt ataacaacag tgcatggcac aaatgtacaa gaaaataact ggttttagtc
                                                                     1080
tctacagttt ctatatggag taaaataagt taaaactttt ctaatgagaa tagctgacag
                                                                     1140
gcagcataca tetttatttt acattttaaa gtetetgeag geatetaett tggttagtta
                                                                     1200
tcaacaatca taacataagc actgatcaga gaactgagca gcattccaat aacgttaaca
                                                                     1260
gatatattat ttetttttga aataetggga aageeeagtt ttaaaatatt attaaaatgt
                                                                     1320
tctaacattt acatactatg aagagttaga tctaataaaa taacatttct tcaaaaataa
                                                                     1380
tettgeagtg etetttagg catgetetga gaegttatea ceaaacatee atacettgaa
                                                                     1440
aatatgacta tcacatatcc atacatccca actcacacac acataattcc ttatacagac
                                                                     1500
caaaaaacaa aaaaacccaa accettatee cacatactga aaaatcaatg gtttttgcaa
                                                                     1560
acgagtettg atgegtatag etgactgeat gtteatgtgg atggatgatt aageateaat
                                                                     1620
tgcaggttag gttttcaact gctagaaatc ccaagcagct ttgcaggtcc ttcagctaaa
                                                                     1680
atgaaacage ettgatttea geeteattte acetgetttt ggttgtttea gtattggagg
                                                                     1740
ccattattgc aaacattctt ggaattcttt tctttccccc agaaagtaat gtatttgtag
                                                                     1800
gcatcacttt tagccctttt cttttcacgt aggttaagta attaaaaaat tccttcttca
                                                                     1860
cgcagttatt gtgggagata ttggcagctg ttaaaatatc agatgttttt ttctttccag
                                                                     1920
atctttgttt ttgatgatac agtttgacat tagttacact aaaaagtaga tgctgccaga
                                                                     1980
aagttatcag tgaatgcaag ggtcccataa aaggtgcttg gttaaatatt cttcatcatc
                                                                     204.0
ttccagttta gtttctttcc taaaggcctg aagtgtctcc agaatcccag tgctcaccca
                                                                     2100
tatttcccat tggtttggcc tgtgctagaa gttggtatga ttgcaccatg cgtagagact
                                                                     2160
ctcttatttc cagattaagt tccatcagtt tgtagttggc ttctgacatg tccaggttag
                                                                     2220
agcctataac tgcaaagctt cctgtctggc ccagcgtctg atgatggaaa tatatatgta
                                                                     2280
acagtgtetg tacagggtca tetteacaae tgecaaagat ateaetggge caqaqaqate
                                                                     2340
tgaaagettt gaettgtget acagetgata taaattettt atttttcaaa gtttcaatta
                                                                     2400
aagaatgaat ggcagtttct atagtagttt gtgcagcttt ggaaatgtca atttcttcgt
                                                                     2460
tttcggaagc ggactcagct tctttgagga tactttccag ttgggcaagt tcctctgaca
                                                                     2520
tgttgatgac ctctgcttca ttttttatcg tatttacttg gttgataagt ttacagtagg
                                                                     2580
cctggaacag aagcagcaat tgaaaatgca atttgtataa tcttcggcag agctccaatt
                                                                     2640
ctgctagtat ttccaattct tgtgcatctg tgtttatcct atacatgtct tctttggcac
                                                                     2700
caaatgtcct cttacaatca tctagccact gctcageggc ttctcttttc acattqtatq
                                                                     2760
tatccaggtg ttcttgcaac tccaaaacac caaacttgag tgtttccagc aaaccacatg
                                                                     2820
acatcagtgt ttcagcatcc acaaagactg ttgggcattt tgaacacagc atcatcactt
                                                                     2880
ccaaggaact tttaaatttg gtaccaatgc gttgcagact atctccaaga aagctgactg
                                                                     2940
cctcattagt tatttctcca aactttcttt gaattgtctg aaacagccta gaaaacacat
                                                                     3000
gaaaagtaaa cactgcagag gacccgtcgg tgtcagacag catctgattg acgtggcagc
                                                                     3060
gccaggcttc ctcttcatca tcatatgcca cgggctgaaa ggcggctatg atggcagaaa
                                                                     3120
gaaatggtga cggcagaggc gacgtctgta cttctggaaa acccatctgg ctcttcttca
                                                                     3180
tetggaetag acagteegga gaaateeget tettettett cacatettte atetagetet
                                                                     3240
ttcagagcta aggtaacatc ctcttcacag actgactcgg ggtaactttc aggagctaga
                                                                     3300
ggctctggca tttcagtttc ttctaaatca agaattcctt gacacacaag agattcctgc
                                                                     3360
tgttcttgaa ttatatagga tccttcatct tcaaaggttg taacatgttc ctcctttaat
                                                                     3420
actgaagttg tatcctcagg cagccggctg ttagcattat ctagagaagc ctccaaagtt
                                                                     3480
ggggtctcat ccctgatttg aagcacttcc tctgttgtga tgctgccagt ggaatcttca
                                                                     3540
gactggagaa gtaagtcagg atggtctggt attgtttcat cagtggcaga atcactgttt
                                                                     3600
aacatctgtg tgcgtgagag tatctggctt gctgtaagtg ccgcttcttc ttccgaggac
                                                                     3660
tcatctgtat cctcctgatt ggtgaggttc aggctggggg tgctactaga gcactggtac
                                                                     3720
teetggaggg atggagtgte ceetttgtea atactgteea gtgagegeet gegaacteee
                                                                     3780
cagttgaaat tgtccatact ttcaccctct gcatcttcca attcaacatc taaaaagtca
                                                                     3840
aaatccttaa aaacaccaaa ctgttgttca ctgctattat cttccacagc tacttcttcc
                                                                     3900
tettgattta tgtettetgt tgtagaaatt aggetagtet gttggteace gaetteeaaa
                                                                     3960
tecteattag aagaaaatac aactgatggg ttetttgggg aggecagatt etgggaccae
                                                                     4020
agagagaaag cacattcatt agcttttctc ttgttcttcg ctgtgataac tgtggccttt
                                                                     4080
tccaactaac aggaaccaag gcattagaat tagaaccaga agaagttgag gaagtacttc
                                                                     4140
tagtgacage aataactttt ggttteecat ttetteeage egeactgtge tgateaceat
                                                                     4200
atttgtttcc aataattggt gtctcagata tatcaaaatg aaaatctaag gtcttcccag
                                                                     4260
gcaactcctt agaaacatta ttaaaaattt tagtgaagga tatttcagga gaacctgtat
                                                                    4320
```

```
ctcctccata ggtcttgggg atatcactgg gtacgacaag actcgcagag cgtgacacca
                                                                      4380
ccagctttaa tatgttaagg gcttccttcc agtaaggact ctgtacatat ttgccaataa
                                                                      4440
tetttatgat etecagatta aactgettgg etggggetge agacaggtea atatgaetea
                                                                      4500
atagactata aataatetgt agtaatgatt getgeataet ggacaateet ttetetaaca
                                                                      4560
gctctgcaag ataagtcaca agattaaatg ttgtatctga gaaggagtca tgcaggtatc
                                                                      4620
tgcacacgac attgatccag ttagaacagt ctctggaata cgtgtgtgta ctgtacaaac
                                                                      4680
tcatcatgtg tgccagattg acaagtgttg ggcatttttc ttctgcacaa acctttgcta
                                                                      4740
ttcgactagc tgtttctttg caaaactgag ttgggctgtc aaaatgctgg attaagtgag
                                                                      4800
gcaataagca aaggatgtta agaggaaagc ctgacaattg ggaaggatcc accaatgtat
                                                                      4860
gtttggagac agaaatgagt ttactgagga ggtgcacggt catttcttgt gtagatgctg
                                                                      4920
aggtaaaacc cttaaggaag agctgctgaa gtcctggaaa attagtccat ttcaatttgc
                                                                      4980
tttgtacatt ttcaatcttc tctcgactct ctgatttatc caaaggcaaa tggataagca
                                                                      5040
gtttgttgag aagcctgaga gccaggaggt attcatattc ataatctgat tctaataaag
                                                                     5100
atgctgctat ccaaaaaatg gtggccatca agttggtagg ctcagtagtg gactgcacgt
                                                                     5160
catacattcc tttctctctt agagaggaaa ggcttctagt ccttgctaaa ctactgctat
                                                                     5220
ggtttatccg tccatccatt atatccagtg tgttactccg ccgccggtca cctcgtcggt
                                                                     5280
caccaatcaa acttaatctc aaagagttac ttcttgcatt actgttatat cccaaataac
                                                                     5340
tgctactatt aatgggactt gtgcttagat tgagttgtcc agtgcttttc ctgttagctg
                                                                     5400
catacttgtt tcccattata ggatcatgat atgaggtttg agaaagggca gaaagaagat
                                                                     5460
cataatgctt catggtttca gccaaagtat caattgcaga ttccaatgtg agaagaagct
                                                                     5520
caatcacaaa teeetgtgea tetteteetg gateeeetae agtttetaea agtetggaga
                                                                     5580
gaacatcaga aagtgtagtt gcagtgagag gctgctttag ggccctgaaa atctgaaagg
                                                                     5640
atctcccagc atagtgtcga gaagaacagg aaagtgctgt ttgcagagca acttcactaa
                                                                     5700
gatgatgttc cagatgaatt ccttctgagc ttgactgctt aaaaacagaa accacatgtt
                                                                     5760
tcaaaaatgt agttaactgt tcagcactct ttatgctagg attcttggca gaaacatcct
                                                                     5820
catggttcca aaggggccct ctttttcttg aggtaatgaa ttccat
                                                                     5866
```

```
<210> 3327
<211> 6086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3488)
<223> similar to gi3043606 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3327
ctcggttctt ctatggatgc agagaatatt tccataaact gttaattcag ggtgattctt
                                                                       60
ctggaaggtt gaatatttgg aacatatcag acacagctga taaacaggga agtgaagaag
                                                                      120
ggctggcaat gacaacttct attagtttgc aagaggcatt tgataaactg aatccttgtc
                                                                      180
ctgctggaat tatagatcag ctgagtgtga ttcccaatag taatgaacct cttaaagtaa
                                                                      240
ctgcaagtgt gtacatacca gcacatggac gacttgtttg tggtcgtgaa gatggaagca
                                                                      300
tagttattgt acctgccaca cagacggcca tagtacagct gttgcaaggg gaacacatgc
                                                                      360
tcagaagagg ttggccacct cacagaacac tccgtggtca tcggaacaaa gtcacatgtt
                                                                      420
tgctatatcc tcatcaggtc tcagctcggt atgatcaaag atacctgata tctggaggtg
                                                                      480
tggatttttc agtcataatt tgggacatat tttctggaga aatgaaacat atcttctgtg
                                                                      540
ttcatggtgg tgagattact caacttctag ttccacctga aaactgtagt gcaagagtac
                                                                      600
agcactgcat ctgctctgta gccagtgacc actcagtagg acttctaagt ttgcgagaga
                                                                      660
```

```
aaaaatgcat aatgttggca tctcgtcacc tttttcctat tcaagtaatc aaatggaggc
                                                                       720
cttctgatga ttacctggtg gtggggtgtt cagatggttc tgtgtacgtc tggcaaatgg
                                                                       780
atactggtgc attggatcgt tgtgtgatgg ggataacagc agttgagatt ctaaacgctt
                                                                      840
gtgatgaagc tgttcctgct gctgttgatt cacttagtca tccagcagtc aacctaaaac
                                                                      900
aagctatgac gagacgtagt cttgctgctc ttaaaaatat ggcccatcat aagctacaaa
                                                                       960
cccttgcaac taacctcttg gcttctgagg catctgacaa gggaaattta cctaaatatt
                                                                     1020
ctcataactc cctgatggtt caagcaataa agacaaacct aacagacccg gacatacatg
                                                                     1080
tgctattctt tgatgtggaa gcgttgatta ttcaactcct gactgaagaa gcctctaggc
                                                                     1140
cgaatactgc tettatttec ccagagaatt tgcaaaaagc atctggcagt tcagacaaag
                                                                     1200
ggggctcttt tttaactgga aaacgagcag cagttctctt ccaacaagtg aaagaaacga
                                                                     1260
tcaaagagaa catcaaggaa cacctccttg atgatgaaga ggaggatgag gagataatga
                                                                     1320
ggcagagaag ggaagaaagt gatcctgaat atcggtccag caaatcaaag ccattgaccc
                                                                     1380
tattagaata taatttaact atggacactg caaagctgtt tatgtcctgc cttcacgcct
                                                                     1440
ggggtttgaa tgaagtactg gatgaagttt gcctggatcg ccttggaatg ctgaaacccc
                                                                     1500
actgcaccgt atcgtttggc ctcttgtcaa gaggaggcca tatgtcactg atgctgccgg
                                                                     1560
gttataatca gcctgcttgt aaactgtcac atgggaaaac agaagtagga aggaagctgc
                                                                     1620
cagcgtctga gggagtagga aagggaactt acggagtgtc ccgtgccgtc accacacagc
                                                                     1680
atctcctgtc tatcatttct ttggcaaata ctttaatgag tatgaccaat gcaactttta
                                                                     1740
ttggtgatca tatgaagaag ggtcctacca ggccacctag accaagcacc ccagaccttt
                                                                     1800
ctaaggcaag gggttcccct ccaacttcca gtaatattgt gcaaggacag attaaacaag
                                                                     1860
ttgctgcacc tgtcgtttcc gctcggtctg atgctgatca ctctggctct gaccctcctt
                                                                     1920
ctgctcctgc tttacatacc tgtttcttag taaatgaagg ttggagtcag ttagctgcta
                                                                     1980
tgcactgtgt tatgctgcca gacctactgg gattggataa atttaggcct ccccttctgg
                                                                     2040
agatgctggc ccgaagatgg caagatcgat gcttggaggt gagagaagcc gcacaggccc
                                                                     2100
tgcttctggc ggaactgaga agaattgagc aggcaggcag gaaggaagcc attgatgcct
                                                                     2160
gggctcctta cttacctcag tacatagacc acgtcatatc acctggagtc acatcagaag
                                                                     2220
ccgcgcagac tatcaccacg gctcctgatg cctcagggcc tgaagcaaaa gtccaggagg
                                                                     2280
aagagcatga ccttgttgac gatgacatca ccactggttg cttatcaagt gtcccacaaa
                                                                     2340
tgaaaaaaat ttctacatct tacgaggaaa gacggaagca agctaccgct attgttttac
                                                                     2400
ttggagtaat aggagetgaa tttggtgetg aaattgaace teetaaacta ttgaccagae
                                                                     2460
ctcgaagete tagecaaatt eetgagggat tegggttgae tagtggtgga tecaactaet
                                                                     2520
cgctggccag acatacttgc aaggcactga cgtttcttct gctacagcct ccaagccca
                                                                     2580
aactteetee acacageact ateegaagaa cageeattga tetgattgga egtgggttea
                                                                     2640
ctgtttggga gccttacatg gatgtgtccg ctgttctgat ggggcttctc gaactttgtg
                                                                     2700
ccgatgccga gaaacaactt gccaacatca caatggggtt gcctctgagc ccagcagctg
                                                                     2760
gacteggece getetgegag geatgeeete tegeteattg ceaeegeeag accaeeegee
                                                                     2820
ttcatcacca ccatagccaa agaggtacac agacatacgg ctcttgcagc aaatacccaa
                                                                     2880
tcacagcaga atatgcacac aacaactett gcacgageta aaggggaaat tttgagagte
                                                                     2940
attgaaattc ttattgaaaa gatgcccaca gatgttgtgg atcttctcgt ggaggttatg
                                                                     3000
gacatcatta tgtactgcct tgaaggatct ttagttaaaa agaaaggtct tcaagaatgt
                                                                     3060
ttcccagcca tctgcaggtt ctacatggtc agctattatg agcggaatca cagaatagca
                                                                     3120
gttggagete gecatggtte agtggeeetg tacgacatee ggaetggaaa atgteagaca
                                                                     3180
atccatggac acaagggacc aatcactgca gtggcttttg ctcctgatgg aagatatctt
                                                                     3240
gccacctact caaacactga cagccacatt tctttttggc agatgaacac gtcactgctg
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ggaagcatcg gcatgctgaa ctcggcacct cagctgcgct gcattaaaac ctaccaggtg
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ccccctgtgc agcccgcgtc ccccggctcc cacaatggcc ttcaagctgg gcccgggtca
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tctggacttc caaccgcaac gtcatcctca tggcccatga cgggaaggag caccgcttca
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tggtctaatg ctgctgcctg ccgccgtgac tgcgttttag ttctctaaat tatccaagcc
                                                                     3540
gatgttgctc tgtccttcct cacaccagat tgttcccagg ggcctgccca ccccagtgcc
                                                                     3600
atccagtggc acggccggcc gggtcttgtc acttgtgcat gcttctcagg ggcagaaccc
                                                                     3660
gctcgtgcca tctgtcgatt cagaggcacg cacacatgct ctgcaggatg tggccatcct
                                                                     3720
gtcaccaggt agtttttccc tgccagagat ggcaggggaa agccagcggt tcctgggaac
                                                                     3780
gctcttgttg cttggtgcaa cagaagcaca aaaatcaata aacactgtga ttgcactccc
                                                                     3840
ageccagate ageattttta gecateteaa eegeacetet gaagtgetge ttgaatetgg
                                                                     3900
ccgttctgac actgggtgtt gaggtcatgt ggcagtcctc acgattgaaa ttattgccct
                                                                     3960
ttgaattacc taaaatattg tttaccaaaa agattctgtg tttacatgtt cttttcttct
                                                                     4020
ggtgattgct aggaaattac tcaatccaat ttcctagggt ttagctacca ccttctttat
                                                                     4080
```

```
Caacagctaa ccaatttgag attcatgatt aattatgtac acaaaaatat tttccttgta
                                                                     4140
gaaaatagtt ttccagacac ttagccttct gaagtgctca tctcttgctt aaatgatagt
ctatttagta gtttaaaata aaaataatca ctccctatga tctagttaat gtaattatcc
                                                                     4260
agtcactgta actaatctct tgaagggact tttgtgataa agagccaagt tcagaagcat
                                                                     4320
agcgtgtacc gaaaatgaag actctcctat ctactgctac agatcctgtt gaagaaagag
                                                                     4380
cttacccctt tcccccggaa aacttgcaat cctgtagttc ccatatgtgt gggcatatgt
                                                                     4440
cagttatgga aattattata attcagcctt caaactacta ctgatcaact aaaggaaagc
                                                                     4500
taataaggta tttcttttaa acaagtattc tggaaaagta ataactatgg cacaaatgtt
                                                                     4560
caggagtgta tataaaaata tgtgggctct cgatttattt gagcaaacat tqcaatqaqq
                                                                     4620
gtgttcatta tgcttctaag taagctttaa ctagaccact ttcttcttat gtcagattqt
                                                                     4680
gctggttcta gctcataata atgaaaaaaa tagaattata ttttgtatga attgtttcta
                                                                     4740
acaaaccttg atctgtatat acttgtgagg ggttgtttgg ttgcctaatt gttgattggt
                                                                     4800
tggttagttg ggcaaaatca tttáttacat gcaaaaatag aaaattattt gttaaattca
                                                                     4860
gagaaaatat gtgaagttta caaaggaacc aaaatgataa tgggagaatt tagtcttaaa
                                                                     4920
agtttaggtt gtcagagttt atctgatata caaaaaagta ggatcaaagt ctaggaacaa
                                                                     4980
acattggtta tttcactgaa acagattttt aaagagcata ttaagaaatt aagaccatta
                                                                     5040
gatcatetet tteataatga tatgatgtta ttteeattga eggeaaatet ataetqttee
                                                                     5100
ttggttttag agttgggtat tctttcaaaa gtgaatttag gcacatgcat gtacattgta
                                                                     5160
tttataaaga ttatatatgt agtttccaag gaagaaacaa agacctatac agtttagact
                                                                     5220
ttatttgttt ggtgaacgtg ctgttgtgtt tggcatagct agagaaatgt aaggtaaaag
                                                                     5280
geteactitg tittecaging gotecagagi citetetata eccaacatat gittactita
                                                                     5340
tgaacttaaa tggaaattaa tttattgtag actacatctc tatttggaat gatgaggtaa
                                                                     5400
atgtatacct tagcattttc tttaacaaaa atgttctgtg tgtcaggaaa gaggtqtqaq
                                                                     5460
ageggtagge agectgeege aaacacaegg atggeteeca eegecaegaa ggttgagaae
                                                                     5520
aaagccaggg gacccagagg agcaatagcc ctgggccaca agcgtgggta ggcctttcac
                                                                     5580
gtatteegte tgeacaggea accaaggeea gtagaaaget atggetgeaa aaccetgggg
                                                                     5640
tggacgatgt ttgatgatta gacggtcatc tctaactact aaactaatat ctgcattctt
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gttaacataa atcteteett ggetatttta atagecacag teccaaaett cateccaget
                                                                     5760
tagatttete ageactgagg taaactetge attgteatee cagegtacae etttaatgtt
                                                                     5820
ttattgattt cactggcact gtatttggga ccctgtccct tgtatatgta gagacatatg
                                                                     5880
tggtcttcat tggtaattta caagcaaaag atgacattga cgtgacacct gtatgaaaat
                                                                     5940
gtgatgattg aacteceetg tgtacagega gtgaattaaa atgtetgeet eteceagaca
                                                                     6000
tttttttaat gattteeett tatagaettt atgtgggetg aatggteetg tgtacatatg
                                                                     6060
tgtgtttaat taaaccattg tattga
                                                                     6086
```

```
<211> 2698
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(792)
<223> similar to gi3885470 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3328
ttttgtttgc catttcctac aggtgaaacc gccatcatta ggattcactg taacgttagt gcatattaaa ctcactagca tttttattaa tggccgttat ctacactaag ctatactgca acttggaaaa agaggacctc tcagaagact cacaatctag catgattaag catgtcgctt 180
```

```
ggctaatctt caccaattgc atcttttct gccctgtggg cgtttttttc atttggcacc
                                                                      240
attgatecae tggeaatete ttateaggee eeggaaataa tggaagtetg ttaetetgat
                                                                      300
attitticca tigocigett geetgaatee agteetgtat gittiettea acceaaagti
                                                                      360
taaagaagac tggaagttac tgaagcgacg tgttaccaag aaaagtggat cagtttcagt
                                                                      420
ttocatcagt agocaaggag gttgtotgga acaggattto tactacgact gtggcatgta
                                                                      480
ctcacatttg cagggcaacc tgactgtttg cgactgctgc gaatcgtttc ttttaacaaa
                                                                      540
gccagtatca tgcaaacact tgataaaatc acacagctgt cctgcattgg cagtggcttc
                                                                      600
ttgccaaaga cctgagggct actggtccga ctgtggcaca cagtcggccc actctgatta
                                                                      660
tgcagatgaa gaagatteet ttgteteaga eagttetgae eaggtgeagg eetgtggaeg
                                                                      720
agcctgcttc taccagagta gaggattccc tttggtgcgc tatgcttaca atctaccaag
                                                                      780
agttaaagac tgaactactg tgtgtgtaac cgtttccccc gtcaaccaaa atcagtgttt
                                                                      840
atagagtgaa coctattoto atotttoato tgggaagcao ttotgtaato actgcotggg
                                                                      900
gtcacttaga agaaggagag gtggcagttt atttctcaaa ccagtcattt tcaaagaaca
                                                                      960
ggtgcctaaa ttataaattg gtgaaaaatg caatgtccaa gcaatgtatg atctgtttga
                                                                     1020
aacaaatata tgacttgaaa aggatcttag gtgtagtaga qcaatataat qttaqttttt
                                                                     1080
tetgatecat aagaageaaa tttataeeta tttgtgtatt aageacaaga taaagaacag
                                                                     1140
ctgttaatat tttttaaaaa tctattttaa aatgtgattt tctataactg aagaaaatat
                                                                     1200
cttgctaatt ttacctaatg tttcatcctt aatctcagga caacttactg cagggccaaa
                                                                     1260
aaagggactg teccagetag aactgtgaga gtatacatag geattacttt attatgtttt
                                                                     1320
cacttgccat ccttgacata agagaactat aaattttgtt taagcaattt ataaatctaa
                                                                     1380
aacctgaaga tgtttttaaa acaatattaa cagctgttag gttaaaaaaa tagctggaca
                                                                     1440
tttgttttca gtcattatac attgctttgg tccaatcagt aattttttct taagtgtttt
                                                                     1500
gtgattacac tactagaaaa aaagtaaaag gctaattgct gtgtgggttt agtcgatttg
                                                                     1560
gctaaactac taactaatgt gggggtttaa tagtatctga gggatttggt ggcttcatgt
                                                                     1620
aatgttctca ttaatgaata cttcctaata tcgttggctc tactaatatt ttccaatttg
                                                                     1680
ctgggatgtc acctagcaat agtttggatt atatagaaag taaactgtgg tcaatacttg
                                                                     1740
catttaatta gacgaaacgg ggagtaatta tgacacgaag tacttatgtt tatttcttag
                                                                     1800
tgagetggat tatettgaac etgtgetatt aaatggaaat ttecatacat ettececata
                                                                     1860
ctatttttta taaaagagcc tattcaatag ctcagaggtt gaactctggt taaacaagat
                                                                     1920
aatatgttat taataaaaat agaagaagaa agaataaagc ttagtcctgt gtctttaaaa 🗀
                                                                     1980
attaaaaatt ttacttgatt cccatctatg ggctttagac ctattactgg gtggagtctt
                                                                     2040
aaagttataa ttgttcaata tgttttttga acagtgtgct aaatcaatag caaacccact
                                                                     2100
gccatattag ttattctgaa tatactaaaa aaatccagct agattgcagt ttaataatta
                                                                     2160
aactgtacat actgtgcata taatgaattt ttatcttatg taaattattt ttagaacaca
                                                                     2220
agttgggaaa tgtggcttct gttcatttcg tttaattaaa gctacctcct aaactatagt
                                                                     2280
ggctgccagt agcagactgt taaattgtgg tttatatact ttttgcattg taaatagtct
                                                                     2340
ttgttgtaca ttgtcagtgt aataaaaaca gaatctttgt atatcaaaat catgtagttt
                                                                     2400
gtataaaatg tgggaaggat ttatttacag tgtgttgtaa ttttgtaagg ccaactattt
                                                                     2460
acaagtttta aaaattgcta tcatgtatat ttacacatct gataaatatt aaatcataac
                                                                     2520
ttggtaagaa actcctaatt aaaaggtttt ttccaaaatt caggttattg aaaacttttc
                                                                     2580
attttattca tttaaaaact agaataacag atatataaaa gtgttaatct ttgtgctata
                                                                     2640
tggtatgaaa tacaatattg tactcagtgt tttgaattat taaagtttct agaaagca
                                                                     2698
```

```
<210> 3329
<211> 645
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (471)...(299)
<223> similar to gi4567200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3329 ttttttttt ttgcactgcc acatagattt taatttgcct aaagatgata gcgattttga 60 gctgtggtta gggataactg ttcccacagt agacctatta ccaacatgag ttgctggctt 120 tcatttaata ggactccaag ctggcaaaca aaccccacca tcttcccaac agccacatca 180 tgagatctag cagcaccagc ctcttgaagt ggcttctcag tggaaggttt gctccgtttc 240 agtgaagett eteteteaaa getetgaegt eaceagggtg eeeetegagg gtetggatag 300 actgtccgaa aggtcaggtt cactctcggt tctctagagt ggtattcttt gggcactcga 360 tgctgccagt cagcttgtgt cgctccttcc atgattaaca aggtcccatg atccaagggt 420 atetteacte tittecacata tgtgtagtet ceattetett cetagaaaac agcatttgtt 480 gtaataaatg ttttgcctgt gtaatcaaga tgcaacagaa cctgacagag gtcaaaaaaa 540 aatggaaacc totgotcagc cagactgtgg gaatccatat atagctctgt catttggcag 600 ctgcttgact gttggcaagt tacctcatct ctctgtaccc tgact 645

```
<210> 3330
<211> 2149
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2151)
<223> similar to gi2224675 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3330
getttgtttg atggtgatee acatttatee acagagaate etgeettggt teetgatget
                                                                       60.
ttgctagcct cagacacttg tctggatata agcgaagctg cctttgacca cagtttcagc
                                                                      120
gatgcctcag gtctcaacac atccacggga acaatagatg acatgagtaa actgacatta
                                                                      180
tecgaaggee ateeggaaac geeagttgat ggggacetag ggaageaaga tatetgetea
                                                                      240
tctgaagcct cgtggggtga ttttgaatat gatgtaatgg gccagaatat cgatgaagat
                                                                      300
ttactgagag agcctgaaca cttcctgtat ggtggtgacc ctcctttgga ggaagattct
                                                                      360
ctgaagcagt cgctggcacc gtacacacct ccctttgatt tgtcttatct cacagaacct
                                                                      420
gcccagagtg ctgaaacaat agaggaagct gggtctccag aaggatgaat ctctgggatg
                                                                      480
cagagcagca gagatagtgc tttctgcact tcctgatcga agaagtgaag gaaaccaggc
                                                                      540
tgagaccaaa aacagactgc ctggatccca gctggctgtg ctgcatattc gtgaagaccc
                                                                      600
tgagtccgtt tatttgccgg taggagcagg ctccaacatt ttgtctccat caaacgttga
                                                                      660
ctgggaagta gaaacagata attctgattt accagcaggt ggagacatag gaccaccaaa
                                                                      720
tggtgccagc aaggaaatac cagaattgga agaagaaaaa acaattccta ccaaagagcc
                                                                      780
tgagcagata aaatcagaat acaaggaaga aagatgcaca gagaagaatg aagatcgtca
                                                                      840
tgcactacac atggattaca tacttgtaaa ccgtgaagaa aattcacact caaagccaga
                                                                      900
gacctgtgaa gaaagagaaa gcatagctga attagaattg tatgtaggtt ccaaagaaac
                                                                      960
agggetgeag ggaacteagt tageaagett eecagacaca tgteageeag ceteettaaa
                                                                     1020
tgaaagaaaa ggtctctctg cagagaaaat gtcttctaaa agcgatacga gatcatcttt
                                                                     1080
tgaaageeet geacaagaee agagttggat gttettggge catagtgagg ttggtgatee
                                                                     1140
atcactggat gccagggact cagggcctgg gtggtctggc aagactgtgg agccgttctc
                                                                     1200
tgaactcggc ttgggtgagg gtccccagct gcagattctg gaagaaatga agcctctaga
                                                                     1260
```

```
atetttagea etagaggaag eetetggtee agteageeaa teacagaaga gtaagageeg
                                                                     1320
aggcagggct ggcccggatg cagttaccca tgacagtgaa tgggaaatgc tttcaccaca
                                                                     1380
gcctgttcag aaaaacatga tctctgacac ggaaatggag gaggagacag agttccttga
                                                                     1440
gctcggaacc aggatatcaa gaccaaatgg actactgtca gaggatgtag gaatggacat
                                                                     1500
cccctttgaa gagggcgtgc tgagtcccag tgctgcagac atgaggcctg aacctcctaa
                                                                     1560
ttctctggat cttaatgaca ctcatcctcg gagaatcaag ctcacagccc caaatatcaa
                                                                     1620
tettetetg gaccaaagtg aaggatetat tetetetgat gataaettgg acagtecaga
                                                                     1680
tgaaattgac atcaatgtgg atgaacttga tacccccgat gaagcagatt cttttgagta
                                                                     1740
cactggccat gatcccacag ccaacaaaga ttctggccaa gagtcagagt ctattccaga
                                                                     1800
atatacggcc gaagaggaac gggaggacaa ccggctttgg aggacagtgg tcattggaga
                                                                     1860
acaagagcag cgcattgaca tgaaggtcat cgagccctac aggagagtca tttctcacqq
                                                                     1920
aggatactat ggggacggtc taaatgccat cattgtgttt gccgcctgtt ttctqccaqa
                                                                     1980
cagcagtegg geggattace actatgteat ggaaaatett tteetatatg taataagtae
                                                                     2040
tttagagttg atggtagetg aagactatat gattgtgtac ttgaatggtg caaccccaa
                                                                     2100
gaaggaggat gccagggcta ggctggatga agaaatgcta ccagatgat
                                                                     2149
```

```
<210> 3331
<211> 2683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2684)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(1352)
<223> similar to gi5262644 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3331
ggagaattat tgacccagag gacctaaaag ctttgctcaa agtgctgcat ctcagaggaa
                                                                       60
taagagaaaa ggcattacaa aaacaaattc agaaacattt ggattatatt actcaagcct
                                                                      120
gcctcaagaa taaggatgtt gctattattg aactgaatga aaatgaagaa aaccaagtaa
                                                                      180
ctcgagatat tgtggagaac tggtcagtag aagaacaagc aatggaaatg gatttgagtg
                                                                      240
teetteaaca ggtagaagat etagaaagga gagttgcate agcaagtttg caagtgaagg
                                                                      300
gttggatgtg tccagagcct gcatcagaaa gggaggactt ggtatatttt gaacataaat
                                                                      360
catttactaa attgtgcaag gagcatgatg gagaatttac tggcgaagac gaaagcagtg
                                                                      420
cacatgcact agaacggaag agtgacaacc ccctagatat agctgtaacc aggctggctg
                                                                      480
atttggagcg gaacattgaa agaagaattg aagaggatat tgctccaggg ctcagggtat
                                                                      540
ggagaagggc attatcagaa gctcgcagtg ctgcacaggt agctctgtgc attcagcaat
                                                                      600
tacagaaatc aatagcatgg gaaaaatcaa ttatgaaagt ttactgccaa atctgtcgaa
                                                                      660
agggagataa tgaagaactg cttcttcttt gtgatggctg tgacaaaggc tgtcatacct
                                                                      720
actgccatag acccaagatt acaacaatcc cagatggaga ctggttttgt ccagcttgca
                                                                      780
ttgctaaggc aagtggtcaa actctaaaaa tcaaaaaact tcatgtcaaa ggaaaaaaga
                                                                      840
ctaatgagtc aaagaaaggc aagaaggtaa ctttaacagg agatactgaa gatgaagact
                                                                      900
ctgcatctac aagtagttca ctaaaaagag gaaacaaaga cctcaagaaa agaaaaatgg
                                                                      960
aggaaaacac ttctattaac ttgtcaaaac aagaaagttt tacttcagtt aagaaaccta
                                                                     1020
```

```
aaagagatga ctccaaggac ctagctcttt gcagtatgat tctgactgaa atggaaactc
                                                                    1080
 atgaggatgc atggcctttt ctacttcctg taaacttgaa acttgttcct ggttataaga
                                                                    1140
 aagttattaa gaagcctatg gatttttcca caattagaga gaaactaagt agtggacagt
                                                                    1200
 atccaaacct tggaaacctt tgctctagat gtcaggcttg tttttgacaa ctgtgaaaca
                                                                    1260
 tttaatgaag atgattctga tataggcaga gctggccaca atatgaggaa gtattttgaa
                                                                    1320
 aaaaagtgga cagatacttt caaagtgagc tgaagttata ataatctctt tattttttc
                                                                    1380
 cttctaaaca aggacaaatg agaccagcaa tgtgaactgt atttacataa acgtgcaagg
                                                                    1440
 cacatacata atgactttct ttttccttaa gtataaaaaa aaagtatcag aagaatgata
                                                                    1500
 ccatttttaa aggcttcatt cctacaacaa ccaaggccct cggttattgg tttgtgtgat
                                                                    1560
 ttatcagcta atttaggtag aacagggaag cacacccaaa gaattttcaa aggaaagggt
                                                                    1620
 gttatagtgc aatagcaatt aaaatatatc aaatcgcact gaatactcaa caccagagct
                                                                    1680
🔪 ctaatgtggg aaatggttet cettteeefe teaataaata tetattttte attttttae
                                                                    1740
 1800
 atccagaatc ttcgttttct gtgaaaagga agaactagaa aattgcttta aatcttggaa
                                                                    1860
 aatacaaggg aatgttttaa aatataaaac aaagccaagt taaactgttt acactggatg
                                                                    1920
 tgcctattaa aagcacccaa anaggaaaac ttttactgta ggagttacaa gtacatttat
                                                                    1980
 atatatatgt tgctgcatca cttgtgtagt taaattgtat ttcaaaacag tgaaaaaatt
                                                                    2040
 gacatgtata tactgttcat tettgtttat attaagtett gttttaaata tgtattatgt
                                                                    2100
 gtatatattg tttgcagaca ttattgttca tgccttagag gattgtagca ttttattttc
                                                                    2160
 gtctgaaggt aatgatagct atacagtctg tacagtaatt atcctctacc aacactgtgg
                                                                    2220
 cgtctcctta atcttggtag tgcctgcctt tgaaacaggg tgtaggggat attagttttc
                                                                    2280
 catttttcta ttttgttata taattttaag ccaccagggc ctaaattaaa gtataatcat
                                                                    2340
 ttgtatccat gtggaataaa attgtgacaa tttcctacgc acacagtatt ttttcataga
                                                                    2400
 aacatttccc tcccatttgc cttgcctcag aaataaattt aaaagacgtt tgtaaccact
                                                                    2460
 gtgttttatc, tactgtgtgt tgtggtggcc tgttggaggc aaatagatca gattttttt
                                                                    2520
 gtacctacgt aagagtactt gaagttttat ttaaaataaa atgttgtgga aaaggtagca
                                                                    2580
 ttctttttt aggagtgtta tttttcacta tgtgtggcac ggatacaata aaagactttt
                                                                   2640
 acaaactaaa aaaaaaaaa agggggggc cgtttttat ata
                                                                    2683
```

```
<211> 2865
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2416)
<223> similar to gi5596370 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3332
atggagegge tttggggtet attecagaga gegeaacaac tgtececaag atceteteag
                                                                       60
accgtctacc agcgtgtgga aggccccgg aaagggcacc tggaggagga agaggaagac
                                                                      120
ggggaggagg gggcggagac attggcccac ttctgcccca tggagctgag gggccctgag
                                                                      180
cccctgggct ctagacccag gcagccaaac ctcattccct gggcggcagc aggacggagg
                                                                      240
getgeeeet acetggteet gaeggeeetg etgatettea etggggeett eetactggge
                                                                      300
tacgtcgcct tccgagggtc ctgccaggcg tgcggagact ctgtgttggt ggtcagtgag
                                                                      360
gatgtcaact atgagcctga cctggatttc caccagggca gactctactg gagcgacctc
                                                                      420
caggecatgt teetgeagtt cetgggggag gggegeetgg aggacaecat caggeaaace
                                                                      480
ageetteggg aaegggtgge aggeteggee gggatggeeg etetgaetea ggaeattege
                                                                      540
```

```
geggegetet egegeeagaa getggaceae gtgtggaceg acaegeaeta egtggggetg
                                                                      600
caatteeegg ateeggetea eeceaacace etgeaetggg tegatgagge egggaaggte
                                                                      660
ggagagcagc tgccgctgga ggaccctgac gtctactgcc cctacagcgc catcggcaac
                                                                      720
gtcacgggag agctggtgta cgcccactac gggcggcccg aagacctgca ggacctgcgg
                                                                      780
gccaggggcg tggatccagt gggccgcctg ctgctggtgc gcgtgggggt gatcagcttc
                                                                      840
gcccagaagg tgaccaatgc tcaggacttc ggggctcaag gagtgctcat atacccagag
                                                                      900
ccagcggact tctcccagga cccacccaag ccaagcctgt ccagccagca ggcagtgtat
                                                                      960
ggacatgtgc acctgggaac tggagacccc tacacacctg gcttcccttc cttcaatcaa
                                                                     1020
acceagetce etccagetge atcateagge ettcccagea teccagecca geccateagt
                                                                     1080
gcagacattg cctcccgcct gctgaggaag ctcaaaggcc ctgtggcccc ccaagaatgg
                                                                     1140
caggggagcc tectaggete ceettateac etgggeeceg ggecacgaet geggetagtg
                                                                     1200
gtcaacaatc acaggacctc cacccccatc aacaacatct tcggctgcat cgaaggccgc
                                                                     1260
tcagagccag atcactacgt tgtcatcggg gcccagaggg atgcatgggg cccaggagca
                                                                     1320
gctaaatccg ctgtggggac ggctatactc ctggagctgg tgcggacctt ttcctccatg
                                                                     1380
gtgagcaacg gcttccggcc ccgcagaagt ctcctcttca tcagctggga cggtggtgac
                                                                     1440
tttggaagcg tgggctccac ggagtggcta gaaggctacc tcagcgtgct gcacctcaaa
                                                                     1500
gccgtagtgt acgtgagcct ggacaacgca gtgctggggg atgacaagtt tcatgccaag
                                                                     1560
accagecece ttetgacaag teteattgag agtgteetga ageaggtgga tteteceaac
                                                                     1620
cacagtgggc agacteteta tgaacaggtg gtgttcacca atteccaget gggattgetg
                                                                     1680
aggigatecg geocetacee atgggacage agigeetatt teetteaegg cettigigg
                                                                     1740
agtecetgee gregagitet cettratgga gggacgacea gggettacee attectgeae
                                                                     1800
acaaaggagg acacttatga gaacctgcat aaggtgctgc aaggccgcct gcccgccgtg
                                                                     1860
geccaggecg tggcccaget egcagggcag etcetcatec ggetcageca egategectg
                                                                     1920
ctgcccctcg acttcggccg ctacggggac gtcgtcctca ggcacatcgg gaacctcaac
                                                                     1980
gagttetetg gggaceteaa ggeeegeggg etgaceetge agtgggtgta eteggegegg
                                                                     2040
ggggactaca teegggegge ggaaaagetg eggeaggaga tetacagete ggaggagaga
                                                                     2100
gacgagcgac tgacacgcat gtacaacgtg cgcataatgc gggtggagtt ctacttcctt
                                                                     2160
teccagtacg tgtegecage egacteeceg tteegecaea tetteatggg cegtggagae
                                                                     2220
cacacgetgg gegecetget ggaccacetg eggetgetge getecaacag eteegggace
                                                                     2280
cccggggcca cctcctccac tggcttccag ggagagccgt ttccggcgtc agctaggccc
                                                                     2340
tgcttcacct gggacgcttg caagggggca gccaatgcgc ttagcgggga tgtctggaac
                                                                     2400
attgataaca acttctgagg ccctggggat cctcacatcc ccgtccccca gtcaagagct
                                                                     2460
cctctgctcc tcgcttgaat gattcagggt cagggaggtg gctcaaagtc cacctctcat
                                                                     2520
tgctgatcaa tttctcatta cccctacaca tctctccacg gagcccagac cccagcacag
                                                                     2580
atatccacac accccagece tgcagtgtag etgacectaa tgtgaeggte atactgtegg
                                                                     2640
ttaatcagag agtagcatcc cttcaatcac agccccttcc cctttctggg gtcctccata
                                                                     2700
cctagagacc actctgggag gtttgctagg ccctgggacc tggccagctc tgttagtggg
                                                                     2760
agagateget ggeaceatag cetteatgge caacaggtgg tatgtggtga aaggggegtg
                                                                     2820
gagtttcaat atcaataaac ccacctgata tcaataaaaa aaaaa
                                                                     2865
```

```
<211> 1716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1478)
<223> similar to gi1334149 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3333
ggcaaggcga ggcgaaagct gcacagggcc ctacgcggcc gcctcagcat gtcggacttc
                                                                       60
gacgagttcg agcggcagct caacgagaat aaacaagagc gggacaagga gaaccggcat
                                                                      120
eggaagegea gecacageeg eteteggage egggaeegea aaegeeggag eeggageege
                                                                      180
gaccggcgca accgggacca gcggagcgcc tcccgggaca ggcgacgacg cagcaaacct
                                                                      240
ttgaccagag gcgctaaaga ggagcacggt ggactgattc gttccccccg ccacgagaag
                                                                      300
aagaagaagg teegtaaata etgggaegtg eeacceecag getttgagea eatcacceea
                                                                      360
atgcagtaca aggccatgca agctgcgggt cagattccag ccactgctct tctccccacc
                                                                      420
atgacccctg acggtctggc tgtgacccca acgccggtgc ccgtggtcgg gagccagatg
                                                                      480
accagacaag cccggcgcct ctacgtgggc aacatcccct ttggcatcac tgaggaggcc
                                                                      540
atgatggatt tetteaaege eeagatgege etggggggge tgaceeagge eeetggeaae
                                                                      600
ccagtgttgg ctgtgcagat taaccaggac aagaattttg cctttttgga gttccgctca
                                                                      660
gtggacgaga ctacccaggc tatggccttt gatggcatca tcttccaggg ccagtcacta
                                                                      720
aagateegea ggeeteaega etaceageeg etteetggea tgteagagaa eeeeteegte
                                                                      780
tatgtgcctg gggttgtgtc cactgtggtc cccgactctg cccacaaget gttcatcggg
                                                                      840
ggcttaccca actacctgaa cgatgaccag gtcaaagagc tgctgacatc ctttgggccc
                                                                      900
ctcaaggcct tcaacctggt caaggacagt gccacggggc tctccaaggg ctacgccctt
                                                                      960
ctgtgagtac gtggacatca cgtcacggat caggccattg cggggctgaa cggcatgcag
                                                                     1020
ctgggggata agaagctgct ggtccagagg gcgagtgtgg gagccaagaa tgcccacgct
                                                                     1080
ggtgagcccc ccgagcacca tcaatcagac gcctgtgacc ctgcaagtgc cgggcttgat
                                                                     1140
gageteccag gtgcagatgg geggeeacce gaetgaggte etgtgeetea tgaacatggt
                                                                     1200
getgeetgag gagetgetgg aegaegagga gtatgaggag ategtggagg atgtgeggga
                                                                     1260
cgagtgcagc aagtacgggc ttgtcaagtc catcgagatc ccccggcctg tggacggcgt
                                                                     1320
cgaggtgccc ggctgcggaa agatctttgt ggagttcacc tctgtgtttg actgccagaa
                                                                     1380
agccatgcag ggcctgacgg gccgcaagtt cgccaacaga gtggttgtca caaaatactg
                                                                     1440
tgaccccgac tettateacc geegggaett etggtagagg eggetggggg agggtggggg
                                                                     1500
cagggctggc tgggggcttc tecceactec egeceeece ettateeece tetgaagaeg
                                                                     1560
atgggcagag gagtgacage egcagacaca egacageegg cageaactgg aatggcagea
                                                                     1620
attaagggtg gggagcgggg gttggggggtt tggggggtta gggcagggag gggactgggg
                                                                     1680
aagtgcgcac acagccccac acagacaaca cgcacg
                                                                     1716
```

```
<210> 3334
<211> 1032
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1035)...(242)
<223> similar to gi950115 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3334
cttttccaca aagggattaa attggggaac ccccgggttt tccccaccc ccggttttaa 60
aaaccgggcc caggaattta attttggggc cccataaaaa aaattttacc ttgccaaccc 120
ccgggggaaa aaattggatc ctttaaaagg gcccccctt ttttttttt ttgctattaa 180
tcctgccaca atattttaa ttacgtacaa agatctgaca tgtcacccag ggacccattt cacccactgc tctgtttggc cgccagtctt ttgtctctct cttcagcaat ggtgaggcgg 300
ataccctttc ctcggggaag agaaatccat ggtttgttgc ccttgccaat aacaaaaatg 360
```

```
ttggaaagtc gagtggcaaa qctqttqcca ttqqcatctt tcacqtqaac cacqtcaaaa
                                                                      420
gatccagggt gcctctctct gttggtgatc acaccaattc ttcctaggtt agcacctcca
                                                                      480
gtcaccatac acaggttacc agtgtcgaac ttgatgaaat cagtaatctt gccagtctcc
                                                                      540
aaatcaatct gaatggtatc attcaccttg atgaggggat cggggtagcg gatggtgcgg
                                                                      600
gcatcatgag tcaccagatg agggatteet tttgtgccca caaagatett teteaetttg
                                                                      660
cacaactigt actiggcctc ctcaggtgta atacgatgta cagcaaagcg acccttggtg
                                                                      720
tcatagatca gacggaaatt ctctcccgtc ttgtcaatgc tgatgacatc catgaatcca
                                                                      780
gcagggtagg ttatatcagt tcggaccttg ccatcgattt taatgaaccg ctgcatgcaa
                                                                      840
atcttettta etteatetge tagteaggge ataettaagt etgtteetea ggaaaaatga
                                                                      900
tgaaggggag acactetete aacttgtggg gaccggtgga tggacgagga gcaaacacac
                                                                      960
eggteaattt atceageate caatgetttg gagetgeeae eegetteaga tgettettgg
                                                                     1020
gaccacgage ca
                                                                    1032
```

```
<210> 3335
<211> 361
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (361)...(196)
<223> similar to gi1841302 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3335 ctcacgcaan gcatggnntt aacgteccta aaanecegee ggacttttet gtaagaaagt 60 gtggcanage accaacecca taaangtgac acatgtacaa ngaagggcaa gganttetet 120 gtacgcccag ggaaagegge gttatgacag gaageagagt ggetetttgt gtgeeetgge 180 ttgtgttetg aagatacage tgataggtta gttgggteca gattatagag gactgagtat 240 tcagcaatgg tgggtgaatt atttaagtet ttggtgttca tetatttaca ggaatgtttt 300 cgatttaaag gattaagtet tagcacatta gaaaggaaat aaaaatgaag attgtactat 360 t

```
<210> 3336
<211> 3818
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3819)...(65)
```

```
<400> 3336
tttttttcgc tatctaagga cataacttta ttggaaacaa agagtggggt gcagaagatg
                                                                      60
gctaggagtc aggctctgag ggaggtggtg gcttctcatc atcaggggga caatcgatga
                                                                     120
agteggeeag catggeaget gtgteatect geteetttte etggagaget teggeetetg
                                                                     180
tetetgtete catetettet tetgeaggtg tetetggtgg gggetgeace ttgteactee
                                                                     240
catecteagt etectettee aacagggttg ggggagcaga gggetettet teaacaaget
                                                                    300
cctggggagg gggccctgcc gcagggcttt ccccttccct ctccacctct ccctgggagg
                                                                     360
ggagcgcttc aggggccagg gtgggagctg tgtcagcccc acgctcctcc tccgtccctg
                                                                    420
gctcctccac ttccaaaagc agcccgggtt cgggttcggg ttctggctgc acctttgggg
                                                                    480
gagactcagg gggaggcaga gctggaggca gggttgaggg tqgaqqtqca ccttcttcta
                                                                     540
cotcoccto tgotgtgcca aactccaggt cttccacctc ttccagttct tcttcctcct
                                                                    600
cetcatecte etettettet tetteeteta acteacette ttetteetea aattetteet ,
                                                                    660
caaactette tteeteetet tetteetett caaaatatte etetteatee tetteetett
                                                                     720
ceteaaagte tteeteetet teetetteet caaagtette eteetettee tettettet
                                                                     780.
840
taactgtcaa atcctcttcc agggctgggg gtcctccccc accaggagtc ccttcaggga
                                                                    900
ccaactgggg tggagggagc gtcacaggac caggaacagg cggcggcgga ggtgggggtg
                                                                    960 -
gcgggagagg ccctggggct gcaggaagtt cttcaggctc ctccttcgct ggcacaggag
                                                                   1020
gggaggetgt tggtggeeca gtgggggeta tagggggtgg tgtggeacet gagggtggtg
                                                                   1080
ggggtggcag ggggggaagc ccctcgggca cgatcaccac gctgtcatca gagtcacttt
                                                                   1140
ccaaggagat ctccacatca gatgcctcct ccttgtcata gtggacaaag gctggtctgg
                                                                   1200
gcactetece eccaaaagtt teatetgggg gtatagtagg tgggggagte ecaetagggg
                                                                   1260
caaggatggg gtcctcattt gagcctgccc ggtggttctc aqqgccaqqa aqaaqccqqq
gaggacagac actaggcctg gacagaaggc ctaggaggtt ggctgtggtg gaggtccagg
                                                                   1380
geteegaggg cacagggeet getgagggea tggggeetge tgaagggeat ggggeetget
                                                                   1440
gagggcatgg agcccactga gggcatgggg cccggaggat ggaacggtgg ggccctgaag
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ggcgatgggg cctcaggagg gggactggag caggtgtggg gcaggtgggg cccatgggct
                                                                   1560
gcaggggagg aacccggggg tgggtcagag cagcacaggt caccagtgct tctgagcaag
                                                                   1620
aaagaggaga cotcaaggot atottotogo tggoogaggg agaaggottg cagggoacag
                                                                   1680
gcaagaggag gtgggcagcg aggagatggg gccagcagca gcgccagcag caggcagtag
                                                                   1740
agttcacggc ggcagcggga gctcgtgtac ggggagctgc ctaggacctc accctgctgt
                                                                   1800
acacccatga ccagggggag gaccaggtca tgcagtctcc tgtgagtctc ctccttgatg
                                                                   1860
agaggeceae acatgaggat ggteeggetg aggeetetga gtgeageege acaeaegteg
                                                                   1920
ctgttggcat tgctatcccc tttccggtgg cttggcgggg ccatagcttc ccccacatcc
                                                                   1980
agetttaget tettggggge getaggette ceagtetgea aacteceate aqqqeteece
                                                                   2040
cgcgggctac gcagcttaag ggcatcagct ggcggggaga tgtcgctqaq caqqtqqqtq
                                                                   2100
agcagggeet etecagagge tectecetga agcatteceg eegaggeeee acaaacetge
                                                                   2160
acceacaget ctaatatege atacacettg gteegaaceg tgetgtaagg ceteteetgg
                                                                   2220
cctggagaga gggaatctct accgatgctc caggaattga ggacctgggg aagcaggcgg
                                                                   2280
ccgatcagga tcccaaagcg caagagccgg cttccacacg cgaggatgag tgcagacagc
                                                                   2340
aggtccaagg cettcaaggt ggatagaggg cagcagcage agcegcaggg accateteca
                                                                   2400
tgcaagctct ggagaaaaaa ggggcagaga taaagagtgg aggaagaaag tgagagccag
                                                                   2460
agagagacag aaacagggaa tgaccattta catatgtaca cataggtaag aaacccaacc
                                                                   2520
cctgatctca tctctcccaa caaaatcaaa cccctatcct ctaaaataga ccctggatgg
                                                                   2580
aaggtaagaa ggatggctgg gcctctcagc aatgactcag ctgagtcccc aaattcaccc
                                                                   2640
tececeaagg aageattige tacactetga eactgtgete etgtgteacg acacatagga
                                                                   2700
agtgatgtta titggacaaa agtagaagct cictgggacg gactccagga tgacactgtt
                                                                   2760
tggggagact caggtcccca gtactttcct ggttgcctgg tatcctgagc aagggctctg
                                                                   2820
aagagatgac aaatcccact tacaatattc ttgctactga cgctgagggt ccggcagatg
                                                                   2880
aaatccagga tttcctgcac agggacggac acgggagctc caaactcaga gctgagcatg
                                                                   2940
agccctaggc agcgggccag tcccgaaaac ctctgccgaa gctggagaag gacatgggca
                                                                   3000
```

```
tcaccatett etgaggacag cagcatetee acceeaggge etteattetg caeaggagea
                                                                     3060
gtototgoto cotogtacag ggococcago agggtgtgca gtgaggocag cagactgtgt
                                                                     3120
agetectget eccagetete ggtgtgette aggeettggg aaaageeage ecctaaagag
                                                                     3180
ggcagccggg aataacactc acaggccaac tgttggagct gagggctcaa ggcatccacc
                                                                     3240
ctagacagaa aaaatgaggc cagcttgcct ttgagagaac cacaagcccg agggaaatag
                                                                     3300
gtcatacaag cetteattee ttecaatget gaetgeteae actetggeet gaggeecage
                                                                     3360
agggaggtga gaaggccagg gaggtggttc atggagatgt cccggaacag tgcaggcagc
                                                                     3420
tgggctgcat atcggaggag gtccctcagg acagccacgg ccagctccat tgtggcaggc
                                                                     3480
gggtcctggg tctgtaacac ctgctgaatg ctccgaagcc aagacacaca gtgctgctgg
                                                                     3540
aatagetetg tggggetete eestaceage agggacagea gacacaggee etcaaacega
                                                                     3600
gttttgatgg aactgagacg tgcattactg agactcacca atgccccaag agctgaaagg
                                                                     3660
ttetgggeee egeecacega eccatgeage egeaatagge acatgageee gggeaaatgt
                                                                     3720
ggggccgagc ggtttggggg atgcaccgga gcaacggcag accccgttcg aggttgcagc
                                                                     3780
aaaccagaaa cactctccag cagcagcagg cggagccg
                                                                     3818
```

```
<210> 3337
<211> 1501
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1503)
<223> similar to gi5257114 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3337
atgageceeg ggetgetget geteggeage geegteetge tegeettegg cetetgetge
                                                                       60
accttegtge accgegeteg cageegetae gageacatee eegggeegee geggeecagt
                                                                      120
ttccttctag gacacctccc ctgcttttgg aaaaaggatg aggttggtgg ccgtgtgctc
                                                                      180
caagatgtgt ttttggattg ggctaagaag tatggacctg ttgtgcgggt caacgtcttc
                                                                      240
cacaaaacct cagtcatcgt cacgagtcct gagtcggtta agaagttcct gatgtcaacc
                                                                      300
aagtacaaca aggactccaa gatgtaccgt gcgctccaga ctgtgtttgg tgagagactc
                                                                      360
ttcggccaag gcttggtgtc cgaatgcaac tatgagcgct ggcacaagca gcggagagtc
                                                                      420
atagacctgg ccttcagccg gagctccttg gttagcttaa tggaaacatt caacgagaag
                                                                      480
gctgagcagc tggtggagat tctagaagcc aaggcagatg ggcagacccc agtgtccatg
                                                                      540
caggacatgc tgacctacac cgccatggac atcctggcca aggcagcttt tgggatggag
                                                                      600
accagtatgc tgctgggtgc ccagaagcct ctgtcccagg cagtgaaact tatgttggag
                                                                      660
ggaatcactg cgtcccgcaa cactctggca aagttcctgc cagggaagag gaagcagctc
                                                                      720
cgggaggtcc gggagagcat tcgcttcctg cgccaggtgg gcagggactg ggtccagcgc
                                                                      780
cgccgggaag ccctgaagag gggcgaggag gttcctgccg acatcctcac acagattctg
                                                                      840
aaagctgaag agggagccca ggacgacgag ggtctgctgg acaacttcgt caccttcttc
                                                                      900
attgctggtc acgagacete tgccaaceae ttggcgttca cagtgatgga gctgtetege
                                                                      960
cagccagaga tcgtggcaag gctgcaggcc gaggtggatg aggtcattgg ttctaagagg
                                                                     1020
tacctggatt tcgaggacct ggggagactg cagtacctgt cccaggtcct caaagagtcg
                                                                     1080
ctgaggctgt acccaccage atggggcace tttcgcctgc tggaagagga gaccttgatt
                                                                     1140
gatggggtca gagtccccgg caacaccccg ctcttgttca gcacctatgt catggggcgg
                                                                     1200
atggacacat actttgagga cccgctgact ttcaaccccg atcgcttcgg ccctggagca
                                                                     1260
eccaagecae ggtteaceta etteccette tecetgggge cacegeteet geategggea
                                                                     1320
gcagtttgct cagatggagg tgaaggtggt catggcaaag ctgctgcaga ggctggagtt
                                                                     1380
```

```
ccggctggtg cccgggcagc gcttcgggct gcaggagcag gccacactca agccactgga 1440 ccccgtgctg tgcaccctgc ggccccgcgg ctggcagccc gcacccccac caccccctg 1500 c
```

```
<210> 3338
<211> 6298
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(6298)
<223> similar to gi2564316 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3338 ggtgaaggac ctgggcagcc tcaatgggac gtttgtgaat gacatgcgca tcccggacca 60 gaagtacgtc acgctgaagc tcaacgatgt catccgcttt ggctacgatt ccaacatgta 120 tgtgctggag cgtgtgcagc accgagtccc ggaggaggca ctcaagcatg aaaagtacac 180 cagccagetg caggtgageg tgaagggttt ggegeecaag aggagegagg caetgeegga 240 aacacacacc atactgegag geetegaace ecaggeegga gaagggggae eggagaceag 300 gaacagaggc agcetettae egeacacece tgtatgggca geeeteetgg tggggtgagg 360 acgatggtag cacgetgeet gacgeceage gecagggaga gecetaceea gagegeeeea 420 agggacccgt gcagcaggac ggggagctcc acggcttccg cgcccctgct gagcctcagg 480 gctgctcgtt ccggcgggag cccagctact tcgagatccc cacgaaggag accccgcagc 540 cgtcgcagcc ccccgaggtg ccggcacacg agatgcccac gaaggatgca gaggcaggtg 600 ggggcggagc ggcccctgtg gtgcagagcc acgcctcctt caccatcgag tttgatgact 660 gcagccctgg caagatgaag atcaaggacc atatcaccaa gttttccctg cgccagcggc 720 ggcccccggg caaggaggcc acacctggcg agatggtgtc ggctgagacc aaggtggccg 780 actggctggt gcagaatgac ccgagcctgc tgcaccgggt tggccctggg gatgaccgcc 840 acagcaccaa gagcgacctg cctgtccaca cccgcaccct gaagggccac aagcacgagg 900 acggcacgca gagtgactca gaggaccccc tggccaaggc ggcctcggcc gctggggtgc 960 ccttggaggc cagcggggg caggtgcggc tgcagaggca gatcaagcgg gacccccagg 1020 agctactaca taaccagcag gcctttgtca tcgagttctt cgacgaggac acgccccgaa 1080 agaagcgctc ccagtccttc acgcacagcc cgtccgggga ccccaaggcc gacaagcgcc 1140 gtggcccaac gccggccgat agggaccgcc ccagtgtccc agccccagtc caggcaggg 1200 geogeagete ggggeeacag agggeegget egeteaageg ggagaagaca gaggaaegge 1260 tgggcagece etegecegee teeegaacee etgeeegeee etteggaage gtggggegee 1320 getecegeet ggeecaggae tteatggeec agtgtetgeg ggagagetec eeggeegeec 1380 ggeccagece egagaaggtt ceteeggtge tgecegetee cetgacacee catgggacca 1440 geccegtggg ecceegace ecaeegeeeg ecceeaegga ecceeagetg accaaggeae 1500 ggaaacagga ggaggatgac agcctcagtg acgcagggac atacaccatc gagaccgagg 1560 cgcaggacac ggaggtggag gaggctcgga agatgatcga ccaggtcttt ggggtgttgg 1620 agtoccotga actotocagg goatottogg coacotttog cocagtoato agaggggaca 1680 gagatgagtc tgatgacggg ggcgtggccc agcggatggc gctactgcag gagtttgcct 1740 cccggccact gggtgcggcc ccccaggcgg agcaccaggg cctcccggtg ccgggctccc 1800 ctgggggtca gaagtgggtg tcccgctggg ccagcctggc tgacagctac tcagacccgg 1860 geeteacaga ggatggeetg ggacgtagag geggggagee ggaggggtee etgeetgtge 1920 gcatgcggcg acggctccct cagctgccca gtgagagggc tgacagccct gcgggcccag 1980 agagcagcag gaggagtggg cctgggccac cggagctgga cagtgagcag cccagccgcc 2040

```
tetteggeea ggaggagttg gateetgaea geeteagega tgeeagtggg teggaegggg
                                                                    2100
gccgaggccc cgagccaggg gtggagccac aggacagcag acgcaggagc ccccaggagg
                                                                    2160
ggcccacgtg gagcaggggt cggcgctcac caagggcccc cggggagcca actcccgcct
                                                                    2220
ctttcttcat tggggaccag aatggggacg ctgtgttatc taggaaactg cttgcggctc
                                                                    2280
2340
totatgtcag tgccaatggg agaatggtca tccagctacg gcctggacgg tccccagaac
                                                                    2400
ccgacggccc tgccccagcc tttctccggc aagagagctt cactaaggag ccagccagtg
                                                                    2460
gtcccccage gcccggcaag ccccccaca tetecageca cccgetteta caggaectgg
                                                                    2520
cegetaceeg ggeegeacge atggaettee acteecagga cacceacetg atettgaagg
                                                                    2580
agacggagac ggccctggcg gccctggagg cccgactcct ctctaattct gtggatgccg
                                                                    2640
agtgtgaggg gggcagcacc ccgaggccgc cggaggacgc cctgtctggg gactcggacg
                                                                    2700
tggacacage cageacegte ageetgegta gtggcaagag egggeecage eccacaacee
                                                                    2760
eccageetet gegggeadag aaggagatgt egecateece gecagetgea caggaceegg
                                                                    2820
gaggcaccgc cctggtcagt gcccgtgagc agtcctcaga gaggcagcat cacccacttg
                                                                    2880
gcccgacgga catgggccgt ggagagccgg tacggcgctc agccataagg cgtggccaca
                                                                    2940
ggccccgagg gtccctggat tggcccagtg aggagcgtgg ccctgtcctc gcccacctac
                                                                    3000
ccagctcaga tgtgatggcc tccaaccacg aaacccctga ggccaccggg gcaggacggc
                                                                    3060
taggitteteg eeggaaacca geggeeecac egecateece agetgeeegg gaggageaga
                                                                    3120
gccgtagete agecagetee cagaagggge egcaggeett gaccegetee aacageetgt
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ccacccctcg ccccacacgg gcctcccggc tgaggcgggc ccggctgggg gacgcttcag
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acactgagge tgeggatggt gageggggt ceetgggeaa ceetgageee gtgggeegge
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cagctgctga gcaggccaag aagctgtcac gcctggacat cctggccatg ccccggaagc
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gggccggctc cttcacaggg actagtgacc ccgaggcagc ccctgcccgc accagcttct
                                                                    3420
ctggccgcag tgtggagttg tgctgtgcca gccgcaagcc caccatggcc gaagcacggg
                                                                    3480
ctgtctccag gaaggctgcc aacacagcca ccaccacggg tccccgccag cccttcagca
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gggcccgctc gggcagtgcc cgatacacct ccaccactca gaccccgagg gctggcagct
                                                                    3600
ccagccgggc tcgttcccgg gcccccggcc cccgggacac ggacgacgat gaggaggagc
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ctgaccetta tggtttcatc gtgcagacgg cagagattgc ggagattgcc aggctgagcc
                                                                    3720
agacgetggt gaaggacgtg gecatectag cecaggagat ceaegatqtq qetqqqacq
                                                                    3780
gtgacacact gggctcctcg gagcctgccc acagcgcctc cctcagcaac atgcccagca
                                                                    3840
eccegeete gaccatetet geeegggagg agetggtgea gegeateece gaggeeagee
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tcaacttcca gaaggtgccg cccggctcgc tgaactctcg ggactttgac cagaacatga
                                                                    3960
acgacagetg tgaggacgee etggecaaca agacgeggee teggaacega gaggaggtga
                                                                    4020
tettegataa cetgatgetg aacceggtgt eccagetgte geaggeeate egtgagaaca
                                                                    4080
cagagcacct tgccgagaag atgaagatcc tctttcagaa cacagggaga gcttgggagg
                                                                    4140
acctggaage caggatcaac geegagaaeg aggtgeeeat eetgaagaea tetaacaagg
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aaatcagctc catcctgaag gaactgaggc gggtgcagaa acagctggaa gttatcaatg
                                                                    4260
ccatcgtgga ccccagtggg agcctggacc tgctcacagg aaacaggagc ttggccagct
                                                                    4320
ctgcacagcc ggggctgggg aagggccgcg tggctgccca gagcccaccc tcacccgcct
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cageegagge cetgetgeea gecetgeece tgaggaattt eccaeagegg gecagetgtg
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ggcctcccag cctcccggac cccaccttcc tccctgatgc cgagaggttc ctgatctagg
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ecceagacet ggecaggeca geeteeetgt gegtgtgegt etetgeette egteegeege
                                                                    4560
acaccegeet geetggeege aggtggttet ceetgaagae ecceacatgt geeatateee
                                                                    4620
tgtgggcggg tgcctcccac gcccttgccc cctcgtcagc tcccagccag caccctactc
                                                                    4680
accetgicea geeceatgge caceceace eetgeetege eccetacagg cetetgggee
                                                                    4740
cageteetgg ccaggetget gecaaggtea ageeeteaag ggeattacee egeeteetet
                                                                    4800
tcatcactgt tatttttgtc tttagcttta aaggaaagag ttgttggtgc cattgcaggt
                                                                    4860
gccccctcca ggcctgactg gctccgccag gcactaacct gccataaccc tttgtgctgg
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cctgcggcca ggcagaggaa gagaggtcga ctgtggggtc atttggtgcc aaacatggag
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gtgggcaggc tcacctgttc ctgggactgt ctgagatggc agggcacttg ccctggtggc
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teccacetga ecceaggeet tttataggea ggageeccae tgettecage etetggtgee
                                                                    5100
aacacagttg ccaaacccat tgagcttggg gctgccctgt ggaggcctcc tgggtatgga
                                                                    5160
ccaggggctt gttgagagct gagccatgca cacaggtgca gacacccccc aactcccatg
                                                                    5220
cacacggeta gtccaggege ctccacgetg cacegtgagg actgcaggge atgtcccegt
                                                                    5280
gaggggctat gggcctctgt aggtgggctt ccaaggtcct gggtgcagcc gggtgcatgg
                                                                    5340
cagcccttct ggcggggtg agcgcacgac caaagtcact ggaagccggg tttccggaag
                                                                    5400
ctcgcagctt ggcctgcacc acacgccctc cccttttggc ttcacgccat caggcctcaa
                                                                    5460
```

```
gtgggcatgg gggcagggac gggcccagga actgttgttt tctcaggatt ctttcagctg
                                                                     5520
ggaacatggc aggtgagcag agettggtgc etetgeegtg geceetgetg gggcageeeg
                                                                     5580
tgttgccgga gcctctaagc caaagagccc gttggccgtg gttggtgggg gtggacgtgg
                                                                     5640
gggtgtccca cctggaccag actggcgtgg gtgagctcca caccctgcct ggcaatggta
                                                                     5700
tgagagtcgg acctggacag ggccagctgc tgggggagcg gcactgggga ctggaggctg
                                                                     5760
gaagcgggtg gtgtgtcc cctgtttact tttagctgag ctggggttgg gtgtacgggt
                                                                     5820
tetgtteete tgageeetge ggeeeacetg atgtttaegt gtgtgtgta gggggggggg
                                                                     5880
gggtggcagg tgtcccccc tggtccccgc cccaagagcc tgctgtctgt atggaggagg
                                                                     5940
tgctageceg gtccaceggg ctgctgecea eccetgeatg ecceagttge ceaeceegee
                                                                     6000
tgcccctgga catgaagtgg tcacgcttca tccacggctc cttcccaccc ctcggcagtg
                                                                     6060
getgtgcaat gttttaagtt cacaagttee tgeteeteee cacaetgage teetttgtte
                                                                     6120
ctcccctcc agcctttgcc tgggaactgg tccttgtttg ccgggcttct cggagggttc
                                                                     6180
actgtacatt cgttctcagg tggtcttgtg gctgtctttc ggaaaatggt tattttatat
                                                                     6240
gatttgtcat ggaatttgtt ctaataaatc attcttctat cacatggcaa aaaaaaaa
                                                                     6298
```

```
<210> 3339
<211> 4348
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3019)
<223> similar to gi3882181 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3339
gttacattta tgacatcctg ggtggaattc ttaagaaata ttggactaaa atacatactt
                                                                       60
teteageage agttgttaca gtttgetaag gaaateagtg tgagggetaa tacagaaaac
                                                                      120
tggtccaaag aaacattgca aaatacagtt gatateette tgcatcatat attecaagaa
                                                                      180
cgaatggatt tgttatctgg aaattttctg aaagaactat ctttaatacc attcttatgt
                                                                      240
cctgagcggg cccccgcgga attcattaga tttcatcctc aatatcaaga ggtaaatgga
                                                                      300
acacttcctc ttataaagtt caatggagca caggtaaatc caaaattcaa gcaatgtgat
                                                                      360
gtactccage tgttatggad atcetgeeet attettecag agaaagetac accettaage
                                                                      420
attaaagaac aagaaggtag tgaccttggt ccacaagaac agcttgaaca agttttaaat
                                                                      480
atgettaatg ttaacetggg teeteetett tgataaggta atcaataact geagaaacat
                                                                      540
atgcaacata acgacgttgg atgaagaaat ggtaaaaact agagcaaaag tcttaaggag
                                                                      600
catatatgaa ttcctcagtg cagaaaaaag ggaatttcgt tttcagttgc gaggggttgc
                                                                      660
ttttgtgatg gtagaagatg gttggaaact tctgaagcct gaggaggtag tcataaacct
                                                                      720
agaatatgaa totgatttta aacottattt gtacaagota cotttagaac ttggcacatt
                                                                      780
tcaccagttg ttcaaacact taggtactga agatattatt tcaactaagc aatatgttga
                                                                      840
agtgttgagc cgcatattta aaaattctga gggcaaacaa ttagatccta atgaaatgcg
                                                                      900
tacagttaag agagtagttt ctggtctgtt caggagtcta cagaatgatt cagtcaaggt
                                                                      960
gaggagtgat ctcgagaatg tacgagacct tgcgctttac ctcccaagcc aggatggtag
                                                                     1020
attggtaaag tcaagcatct tagtgtttga cgatgcgcca cattataaaa gtagaatcca
                                                                     1080
ggggaatatt ggtgtgcaaa tgttagttga tctcagccag tgctacttag ggaaagacca
                                                                     1140
tggatticac actaagttga taatgctctt tcctcaaaaa cttagacctc gattattgag
                                                                     1200
cagtatactt gaagaacaat tagatgaaga gactcccaaa gtttgtcagt ttggagcgtt
                                                                     1260
gtgttctctt caaggaagat tgcagttact cttgtcttct gaacagttca ttacaggact
                                                                     1320
gattagaatt atgaagcatg aaaatgataa tgcttttctg gccaatgaag aaaaagccat
                                                                     1380
```

				gaaagtatcc			1440
				tececacage			1500
	tttgaagcga	tttggtaatg	cagtcatctt	gctctacatt	caacattcag	acagtaaaga	1560
				tcttaaatca			1620
				atgcaatgat			1680
				ttcggagcca			1740
				ttacactctg			1800
	tttttacccg	ggagaatatg	ttgggtacct	tgttgatgct	gaaggtggtg	atatctatgg	1860
	atcataccag	ccaacataca	catatgcaat	tattgtacaa	gaagttgaaa	gagaagatgc	1920
	tgacaattct	agttttctag	gaaagatata	tcagatagat	attggttata	gtgaatataa	1980
	aatagttagc	tctcttgatc	tgtataagtt	ttcaagacct	gaggaaagct	ctcaaagcag	2040
	ggacagtgct	ccttctacac	caaccagccc	cactgagttc	ctcacccctg	gcctgagaag	2100
	cattcctcct	cttttctctg	gtagagagag	ccacaagact	tcttccaaac	atcagtcccc	2160
	caaaaagctt	aaggttaatt	ctttaccaga	aatcttaaaa	gaagtgacat	ctgtggtgga	2220
				aaaaaagatt			2280
				tgacattgcc			2340
	gcagaatgaa	atcaacagat	taaaaaaaca	ggcttttcta	gatcaaaatg	cagacagggc	2400
	ctccagacga	acattttcaa	cctcagcatc	ccgatttcag	tcagacaaat	actcatttca	2460
	gtagattcta	tacttcatgg	aatcaagaag	caacgagcca	taaatctgaa	agacagcaac	2520
	agaacaaaga	aaaatgcccc	ccttcagccg	gacagactta	ctctcaaagg	ttctttgttc	2580
	ctcccacttt	caagtcggtt	ggcaatccag	tggaagcacg	cagatggcta	agacaagcca	2640
	gagcaaactt	ctcagctgcc	aggaatgacc	ttcataaaaa	tgccaatgag	tgggtgtgct	2700
	ttaaatgtta	cctttctacc	aagttagctt	tgattgcagc	tgactatgct	gtgaggggaa	2760
	agtctgataa	agatgtaaaa	ccaactgcac	ttgctcagaa	aatagaggaa	tatagtcagc	2820
	aacttgaagg	actgacaaat	gatgttcaca	cattggaagc	ttatggtgta	gacagtttaa	2880
	aaacaagata	ccctgatttg	cttccctttc	ctcagatccc	aaatgacagg	ttcacttctg	2940
	aggttgctat	gagggtgatg	gaatgtactg	cctgtatcat	aataaaactt	gaaaatttta	3000
	tgcaacaaaa	agtgtgaaga	tatttaacga	aaaaaaggt	agatetttga	atgtggttgt	3060
	agcacgaata	aattgctgta	cttcattaag	cttcattgcc	aattagctag	gaattgttaa	3120
	gcacattgca	gattgttctt	ggagaattct	ggagttgtca	tgaacatgac	taccaccgga	3180
	aaaccttaac	tgaatctaat	agatgactat	tttgaagatg	gtggtgagct	gcaaaatagc	3240
	rggarggart	tgaatgattg	ggatgataca	tcattgaact	gcactttata	taaccaaagc	3300
	ttagcagttt	gttagataag	agtctatgta	tgtctctggt	taggatgaag	ttaattttat	3360
	gtttttaaca	tggtatttt	gaaggagcta	atgaaacact	ggacatataa	ttggtttaaa	3420
	cataagggga	attaagtett	tgtagtctgt	cattttttta	agtggatcct	cttggatgcg	3480
	Cattteec	accagetgge	tetgateatg	aatttgttgt	aattttatgt	tgtactcagt	3540
•	geatttaaga	aatggtagag	tattttaatc	ctattacttg	actaagagtg	tgaaggtagt	3600
	accittiaga	grgcacrgag	tgcactttac	atctttattt	aaatttttt	ttaacatctt	3660
	attitacag	getteetgtt	tgatgaagat	agcaacggaa	aactcaaaat	ggtggcagtt	3720
	tattacca	gitgitagia	ttgtttctgg	aaactgcttg	ccaagacaac	atttattaac	3780
	tactatact	cctgetttat	gtttgtgtgt	acatattttc	cacaaatgtt	ataatttata	3840
	agigiggii	gaacaggatg	caatcttttg	ttgtctaaag	gtgctgcagt	taaaaaaaa	3900
	attattaaaa	tastatat	gycatgtagt	ggagttttt	taactttaaa	aacatcaaaa	3960
	atratosess	atanantte	acctagtagt	ttataattat	cggcttatat	ttccccatga	4020
	ttottttaa	gaatgtaaa	acteatgttt	gtctcgccat	gcttctttac	tttaacatat	4080
	tastactors	yaarytaaaa tataatta	ggtaatgata	attagtttat	ataagtgtac	tggctgtaaa	4140
	tttatta	antaccitat	gcaaccaagg	gcttacagaa	catgttgaaa	cttttttac	4200
	atotactos	ttotootet	guttgcacct	ccacatttta	ttgcttctgg	atgtgaaatc	4260
	trasassass	aaaaaaaaa	acacacac	ccatactttt	aataaaggaa	aatgtacata	4320
	tgaaaaaaa	aaaaaayyyg	egeeeget			•	4348
				•			

<210> 3340 <211> 2983

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2984)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2314)...(1020)
<223> similar to gi35842 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3340

```
ttttttttt ttacacctaa atttaattta ttttattaaa ataacataat tcgagggacc
                                                                       60
atcagataac tgtattttgt caggtgcaat aaaaaacaaa attaaaaccc aaatcatcaa
                                                                      120
aaaaacctgt tttcctggct tccttggtat acacatgatg tagactagag aaacaaggct
                                                                      180
gtttgtttgt tttgtttgtt agagaaacga aaggcgtgcc ctgcggcccc gcccccatag
                                                                      240
ggggcagete cetggaaaga caaaaattea eeatgatggg aaggaetgge teeetgagga
                                                                      300
ggggctgagg atgcgggaat ttgcccgagt gccttgcctg gggaaaacca tcccaatggc
                                                                      360
actgggacac cttaggaagg ctgtgaaagg gagggacgtg ttcccctaag gaaaaagttc
                                                                      420
ccatagtacc aaaggcaggg ttccttccgg gcgggccaga gttttcggca gtccttgggc
                                                                      480
tgtttgggtg cctaatgtgc caaatggtct ggacgctgca ccactcttct gaaaaaaagt
                                                                      540
eccgcetgtt gacatgcatt cettecagaa agetgatttt ccaaaattec catggtgtet
                                                                      600
cccacaataa ggggctggga ctggcctggc ttaccttact tccctctaaa ttatcatgta
                                                                      660
geccaeaget ggggetggge cecetgettt tttgtaetaa cateaacaat cecatttgeg
                                                                      720
catcctaaag aaaggctggg cccttgagca tgggggaatg tgggggaggg agcaggacac
                                                                      780
accagcactg caaatgggct teettettee agggeeceaa agggaataga aaagaaggea
                                                                      840
acaaggagtt taaggcccct gtgaancaat cctaagaagg tcccttaaca accagcttcc
                                                                      900
tetgaaaaac atgtgttetg ecetetggag aaaagggage aagaaaagtg gtgeetgetg
                                                                      960
gcttctcctc ctcccctggc agcctgaaga caggtgcaaa gtcaactagg aagaccagcc
                                                                     1020
agcctcgggg aacttggtca gcgtgcaagc cattgatatc ctcagtgtgg gctgcccqat
                                                                     1080
gcaagggatg gctcggaagc gctccggttg atcttcggta gagagtgttg gagcagctca
                                                                     1140
atggaaggcc aggatctggg gaaaaaagag gcctctcttc ctttaacttt cttcacacag
                                                                     1200
tragetacea gertetteat tgettttggg gragttactt atatagetta ctaagatetg
                                                                     1260
gggaggcata teetteggee caccatgaag atgatetgat eteggttgtt gatgtgagaa
                                                                     1320
taaggaaget eeeeegteat eagtteatae aataegatge eataggagta gacateegae
                                                                     1380
tggaaactga atgggttgtt atcctgcatt cggatcacct ctggggccat ccagaggaca
                                                                     1440
gagecagtag gttgtteaac etgetgagaa ceaetecage gtgaetttae tgttgeeaaa
                                                                     1500
ccaaaatctc caattttcac tgttaagcct tcatggagaa atatattgtt ggatttcatg
                                                                     1560
tetetatgga tgatgttett tgcatgcaaa tagtecatte cetgageegt etgeegggea
                                                                     1620
atgtcaatta agctggaaca tctgaaactt ggtctcctgg acatgcaggt gtttgtagag
                                                                     1680
getgetgeee tegeaceact gggteacaat tgecaggttg teetttgtea tgtaceceat
                                                                     1740
gaaaagcaga atgttcacat gccgtgtttt gcgcagaaca gccacctcat tcctgaaggc
                                                                     1800
ctggaattgc tctggggttg ggtcgacaac ctttaggatc tttactgcaa catctccgtg
                                                                     1860
ccatttaccc ttataaacag ttccaaaaga gcctgaccca atccgagtgg acagcatcac
                                                                     1920
ttcactggct tctatttccc aataatagct tgaatctctc tgtccacgag gcctaatttt
                                                                     1980
gtttttctcc tgggtcccag atactggtgc ccgctctctt tgtgctggca cgggggtttt
                                                                     2040
cggctgtgac cagcctgttg ggctcagatt gttggggcta ctggacaggg ctgaaggtga
                                                                     2100
ggctgattcg ctgtgacttc gaattgcatc cttctgcaat ccggtgcgcc gcagccgctg
                                                                     2160
ggccctggac tccaccggct cctcgtccga gctctctcca acttcggcct ccagctgctc
                                                                     2220
tgggcccage tcggactggt ccgccgggcc caagggctct ggtgccttct ggaaagcgct
                                                                     2280
ggctgggact tcaccctcct ccttgaagag cagaacgtga agcttcccgc gcgccaccag
                                                                     2340
```

```
cagecegtgg ttggceteca geogetgeae etgggetgeg eggegeaeeg egegetettg
                                                                     2400
99cggcgttg gcgtgcgagc tcacgcgctc cgccttggcc agcagctgcg ccaaggtgtt
                                                                     2460
gctggtggtg tcgtggctgc gactcagagc gcccaggccg ctctggatgc ggcgcacgga
                                                                     2520
ecetgeeagg cetecetgee tregageeag geeteeetge egeteeegea gagteteeag
                                                                     2580
catggaggee agetteteca geagggteae caeegteaeg gegtgeaegg gaeeeeeege
                                                                     2640
eggegeeteg ggeaeaggee eeggeteeaa egeaetetee eteatgatee etgaeegete
                                                                     2700
tgctccgtct gcctgcaact gctggctgca ctacggtcag gggcctcctt tccctggctc
                                                                     2760
etececaget ceagetgtga eteaggeagg eggagttgge ettetgggge ggegggaggg
                                                                     2820
cgcgagggcg tggggatgtt ggcagcgggg tctcttgaaa gcgtttcgcc ttccgctgtc
                                                                     2880
eegegeeggg ggeetgetgg gaageetgtt ggeeeeaaat eggeeeeetg caaaceetet
                                                                     2940
cactetgagt ttgaggtace etecteeget ccaaateeet gge
                                                                     2983
```

```
<210> 3341
<211> 1321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1321)
<223> similar to gi2055392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3341
cacacactge accacagete teccacetet gaggeegagg agttegtete eegectetee
                                                                       60
accoagaact acttocgete cetgeceega ggeaceagea acatgaceta tgggacette
                                                                      120
aactteeteg ggggeegget gatgateeet aatacaggaa teageeteet cateceeca
                                                                      180
gatgecatae ecegagggaa gatetatgag atetacetea egetgeacaa geeggaagae
                                                                      240
gtgaggttgc ccctagctgg ctgtcagacc ctgctgagtc ccatcgttag ctgtggaccc
                                                                      300
cetgggegte etgettacce ggecagteat cetggggtat ggaccactgt gggggagece
                                                                      360
agccctgaca gctgggagcc tgcgcctcaa aaagcagtcg tgcgagggca gctgggagga
                                                                      420
tgtgctgcac ctgggcgagg aggcgcctc ccacctctac tactgccagc tggaggccag
                                                                      480
tgcctgctac gtcttcaccg agcagetgag ccgctatgcc ctggtgggag aggccctcag
                                                                      540
cgtggctgcc gccaagcgcc tcaagctgct tctgtttgcg ccggtggcct gcacctccct
                                                                      600
cgagtacaac atactggtct actgcctgca tgacactcac gatgcactca acgtagtggt
                                                                      660
gcagctggag aagcagctgc agggacagct gatccaggag ccactggtac tgcacttcaa
                                                                      720
ggacagttac cacaacctgc gcctatccat ccacgatgtg cccagctccc tgtggaagaq
                                                                      780
taagctcctt gtcagctacc aggagatccc cttttatcac atctggaatg gcacgcagcg
                                                                      840
gtacttgcac tgcaccttca ccctggagcg tgtcagcccc agcactagtg acctggcctg
                                                                      900
caagetgtgg gtgtggcagg tggagggcga cgggcagage ttcagcatca acttcaacat
                                                                      960
caccaaggac acaaggtttg ctgagctgct ggctctggag agtgaagcgg gggtcccagc
                                                                     1020
cctggtgggc cccagtgcct tcaagatccc cttcctcatt cggcagaaga taatttccag
                                                                     1080
cctggaccca ccctgtaggc ggggtgccga ctggcggact ctggcccaga aactccacct
                                                                     1140
ggacagecat eteagettet ttgeetecaa geecageece acagecatga teeteaacet
                                                                     1200
gtgggaggcg cggcacttcc ccaacggcaa cctcagccag ctggctgcag cagtggctgg
                                                                     1260
gactgggcca gcaggacggt ggcttctttc acagtgttcg gaggctgagt gctgaggccg
                                                                     1320
q
                                                                     1321
```

```
<210> 3342
<211> 777
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(338)
<223> similar to gi1478205 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3342 gggtccgctg cagggcaggt tcagcagcaa cagcagcggc gacaccagca gggaaaagtg 60 acagtgaaat acgatcgtaa ggagcttcgg aagcggctgg tgctggagga atggatcgtg 120 gagcagctgg gtcagctcta cggctgcgag gaagaagaaa tgccagaggt agaaattgac 180 attgatgate tittigatge atacagigat gaacagagag eticaaaatt acaggaaget 240 cttgtagact gctacaaacc aacagaggaa tttatcaaag agctgctttc tcggataaga 300 ggcatgagga aactgagccc ctccgcagaa gaagagtgta tgattctgga acagggtgaa 360 acteteccag agatgaagaa agagteetgg gatttgtaet teatgaagae ttttgtgaaa 420 gaataggtgt cottatgaac aacgtttttg ttttttttt ttctttttg ggggtaaagg 480 tgggggggtc tattagacat ttattcaaga gcgttctttt ttgggtttta aaggtttttg 540 ttaatgtaat atttaaatac caaaaatatc ttgactttag ccacagccta cccagggttt 600 atcaagggag ggggaccete agggaaggge eeceedaggt tgegttteet geagggacte 660 aaatgttaat tooottatga toooggaaaa atagtttttt tacaagaagt tgggcaaaat 720 ttttttccta aagttggaca ttggactcaa ttggcaaatt tttcaacctg gtatttt 777

```
<210> 3343
<211> 408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(408)
<223> similar to gi325465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3343

ggcttcccca agggttcaag aactcccca ccatcttcgg ggaggcattg cctcaagacc footccagaagtt tgccaccaga gacctagact gggtgttgct ccagtacgtt gatgatcttt 120
tgctgggaca ccccatggca gtcgggtgca ccaaaggaac agatgctcta ctccggcacc 180
tggaggactg tgggtataag atgtccaaga aaaaagctta gatctgccga cagcaggtac 240
attacttagg atttactatc cgaaagtggg agacagcta ggatcagaaa gaaacaggtc 300
atttgaaatc tactggagcc taagaccaga aggcaggtga gagaattctt atgggctgtg
gggttttgaa gactgtagat cccaaaattt gcagtataag ccaagcct 408
```

```
<210> 3344
<211> 3932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3933)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3934)...(282)
<223> similar to gi2245317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3344
ttttttttt ttggggtgca ggtggcgttt attttcatgg atttatacac actggaaaag
                                                                       60
cctctgcgcc catgcccacg ccctcctccc tcccccggc gctgggtccc ctcatatgaa
                                                                      120
agggaagtaa caccgaggag cacacggaga tatagggtgt ggggctgggg gggccagcgc
                                                                      180
tggggccaaa agtctgggtc cccagcctcc cacacgcagc ccctcgggcc ccttgggtgt
                                                                      240
gtcaataaat aacccaggtc caggctggtg tgggcctcac tcctcgctgt ccagcttcag
                                                                      300
getgatgete egtgettige ecegitgecag ggtggtgggt ggtgtteceg ggeeeteacg
                                                                      360
ctccgcctgg ctggggcccc tcgagcgaag cagctggctc tgtttgcgca ggaagtccac
                                                                      420
gggggcagcc acaccatagc tgctcttgcc caaggcagct ctcgggggtc ccgaggaggc
                                                                      480
atgcgagtgc gagcccgctt ccagctggcc caggtgggcc acatagccgt ctgacaggaa
                                                                      540
ctggcactgc gcctgtagct tccgcacggc acggcccacg atgtaggtct ggctcgggga
                                                                      600
cagececage geogegtata cagecacate tttgggagae ceataacegg ceacgatgtt
                                                                      660
cagteetace teetgeacea ggetetggag aaacattgee ttetggegta gtgggtegtg
                                                                      720
ggtgaggccg tcgcagaagg agacgacgcc cgttggggga agttgtgctg ccganagcca
                                                                      780
tgccaccacg cggtgcttct gcatatccgg ccggcctgtg acattacacc gatcaggtag
                                                                      840
eegganteen nagteetgee agtgeetgae eaegteeaeg ggegeeaget egeaeettgg
                                                                      900
ggtcgctgcc catgatggag acgctggcgg tgaaggagcc gtcgatgctg aagaccacag
                                                                     960
cctccgtgcc gcgggccacc acagtcaggc agcattcggc ataggtgtgg tcgccctga
                                                                     1020
ccaccatgcg cacggggtag acaccaatgc ccagcgcgcg ttctggggga actgggaagg
                                                                     1080
tgaggcggcc cgagctattg gtgacttcgg tgccaaagtg gatccacttg cccgacagcg
                                                                     1140
getgegteat gatgtagaea tecacettet etecagtgag egtgaegaeg tecaggggee
                                                                     1200
cgtacatgaa gcgcccgctt agcacctggg ggcggccctc gcacaccacc gtgtcgctcg
                                                                     1260
cccggtggtt ggaagtgacg ttccggatct tgacctgcgt gcgttttcgc tgccacttct
                                                                     1320
ccctggggaa ggccgggctg tagatggacg gctcctcgca ttccgccagc tgtggccgct
                                                                     1380
cettetegat cacetggege aggatgaaeg ceaecaegte ggeggaetee cagtagetgg
                                                                     1440
cgtggaagag gtggggcagc gtgacggtgg gaaaggcggt gagcgcctcg gggcagtaca
                                                                     1500
gegagtagte gateegettg gteececade agegeteeag gatettaace aceteactgg
                                                                     1560
tggtgctggg ggcggctggc tgggccgggg ggtcagtggc caactcactg cccttccaga
                                                                     1620
aggcaccgct agtagaggtg ggtgttgagg gcaccagcat ctccagctcc tccagaaaga
                                                                     1680
ggctggagtg cgtctgcaga gtgtcggcca gcagcaggga tgagccatct cccaggggga
                                                                     1740
acttctggta gcggggcacg gtcagtgggg cgatggcctg gaacttcggg gccagcaggg
                                                                     1800
getegaggeg tgaggegeag gggteggeeg egtggaagag gttgtagate tgtteacagg
                                                                     1860
ctgggcgcat ctgggctgcc tccagggcgg gcatcacagt tttgcgcaga gccagcacca
                                                                     1920
```

```
ggcccagtgg ggagccgaag aggaagaagc cagagacctt gaagtcaagg cgggcagtgc
                                                                     1980
tgctggggcc gtcaggtgcc tcggaactgg cagcgggtgg gcagaaggcc gtgcttgccc
                                                                     2040
gccggggctc ccaggaggag gtggttgcgg gggctgcctg aaggctgttc tgagagccct
                                                                     2100
cgggctcagg actggccatg tcgctgggga tgcgctgggg aggcaaggcc gagggttctg
                                                                     2160
ggctgccccg acccaggcct tccacaccat ctgccagggg gtcccgcact gggccaaact
                                                                     2220
ccggagagag cagetcattg ttcatgetee caeggegget getgeeeega eteeeggtge
                                                                     2280
ccgcgttagc actgtggcag agtgcatcaa agcccaggat gccaccaaca ccatctccaa
                                                                     2340
tcagtgcgac ctgcccacag aagccggcac cctcaggtga gcgcaggaag gctgagtagg
                                                                     2400
cctggttggt gcgggcaatg acggtggcca cggcgccctg gtagcgggag.gatgaggtgg
                                                                     2460
ccagcagtgg cagggcagcc agtggaatgt ggtcttggga gcgagacagg ctgtcccat
                                                                     2520
cgtggctgta agggctcagg ttggagacaa gggcataggc ggcggcgcag atgggtggac
                                                                     2580
agggcaccag tegeagegee aegtggeeea aggeeteagg gaagtggatg egggtgaegg
                                                                     2640
cctcgaagge ggageteage gtetgeacat cegeetgett ggagttggeg tetecaggge
                                                                     2700
ctgagtccag gatgttgccg ctgtgcagga taaggaagag ggcgtggact gcgcatgcct
                                                                     2760
cagececcag eteccegget ceatecagge eetetgagte eetgggtget tgggeeccat
                                                                     2820
cctcaatgcc tttagctgcc tcggctccag gctctggcgt tccctctgcc tccactgggg
                                                                     2880
aggcaaaggc atcaatgaag tcattggagt tccacttggt catctccttg gggaagacct
                                                                     2940
cctcactgtc cgagaagccg tgggcatcaa agaactcttc ctcggagctg ttctcagagt
                                                                     3000
ctcgggcaat gttctgcatg cgccactcag acaagctctg ggggagacac agcccctcca
                                                                     3060
tgttggggat gagtagggag ggaacgggaa ggatgaggga ccactgcttc ccaaagctgg
                                                                     3120
catcggggga ggcatctggg cctggggggg cctcaggccc atcgggggtg ccagtgttgc
                                                                     3180
tggccgcaga ccgggcctcg gtgctcggtt tcccgggggg ctgggcctcg gacccctcac
                                                                     3240
tgcctgtgtt gcacttggcc atgcgctggg ccagcatgcg agcagtctcc tcttccagtg
                                                                     3300
eceggatgte agecatgete agetetgtee acteateetg ceageaceag geetggeggt
                                                                     3360
gggcccgcag catcacccga cgcagaccta catcatggat gaactgctcg atcttggctt
                                                                     3420
gcatgcccca gtagcggaac tcaaccttgc acagcttata ggcacacata aggggccccg
                                                                     3480
tetgtgeege egteegtgee cagteateag acagtggeee teggeeegte ttgacegagt
                                                                     3540
gataaagccg ggggtcctct tetgetttgt actegeetgg ggecaetgea teeegcaega
                                                                     3600
tgtcgatggt gtccaggatg cgctgtctcc tctcggcccc gctcaggttg aagacgtttg
                                                                     3660
gctgctgccc cccatcaggc aggtaatagg tctcaatttc aatggagaat ttctccacga
                                                                     3720
aagggcaggt gtaccgggtt cgggtgtagg ggtaggcatt ccaggattcc tcttctacct
                                                                     3780
gcagggcagc cttgggcagc agtgcccgga accagcctgg gatgtgggag cccacgtggt
                                                                     3840
acacettgtg tgtgtattgc ccgctgcccc cgggcccatc cgtgtagggc cggttggcca
                                                                     3900
ggatetecae geegetgeee geaceactag ee
                                                                     3932
```

```
<211> 3235
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(2338)
<223> similar to gi4200216 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3345
actcggttta gagggcttcg gccggggtg gccccatgga cagccctgct ggcactgggc 60
ctgcctggct gggtgttggc tgtctcagcc acggcggctg ctgtggtccc cgagcagcat 120
gcctccgtag ctggccagca tcccctggac tggctgctca cagaccgggg ccccttccac 180
```

	agtatgctga					240
	gggagtttgc					300
	tgccattgcc			_		360
	atctgcaaca					420
	ccacccttgg					480
	agacagagac					540
	ccctggagac					600
	gacggctgca					660
	gtcctctggg					720
	gtccagagaa					780
	agcgctttgt					840
	gcaaggagaa					900
	atgctgacat					960
	acaaccggca					1020
ctgcccgatg	accggttcct	gaactccaca	gctatctccc	agttctgggc	catggacacc	1080
agccttcagc	accgctacca	gcagctggga	gctggcttga	aagtgctgtt	caaaaagacc	1140
catcggatcc	tacgccggct	cttcaacctc	tgcaagcgct	gccatcgcca	gcctcgcttc	1200
cgcctgccca	aggagaggtc	cttgtcctac	tggtggaacc	gaatccagtc	cctcctctac	1260
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tatgaccaat	cttcctgcca	gggccccatc	ccatgtgcct	tgggcgaagg	gcccgcgtgt	1380
gcccactgtg	ctccagacaa	tagcacacgc	tgtgggagct	gcaacccggg	ctatgtgctg	1440
gcccaggggc	tgtgccggcc	agaggtggcc	gagtccctgg	aaaactttct	tgggctggag	1500
acagacttgc	aggacctgga	gctaaagtac	çtgctgcaga	agcaggatag	ccgcattgag	·· 1560
gtacactcca	tcttcatcag	caatgacatg	cggctgggca	gctggtttga	cccttcctgg	1620
aggaagcgca	tgctgctcac	cctgaagagc	aacaagtaca	agcctgggct	ggtgcacgtg	1680
atgttggcct	tgtccttgca	gatctgtctc	accaagaaca	gcaccctgga	gcctgtcatg	1740
gccatctacg	tcaacccctt	tgggggcagc	cactctgaga	gctggttcat	gcctgtgaat	1800
gagggcagct	ttcctgactg	ggaaaggact	aacgtggatg	cagctgccca	gtgccaaaac	1860
tggactatca	ccttggggaa	taggtggaag	actttctttg	agacagttca	tgtttaccta	1920
cggagccgaa	tcaagtccct	ggatgacagc	tccaatgaga	caatctacta	tgagcccctg	1980
gagatgactg	atccctctaa	gaatttgggt	tacatgaaaa	ttaacacctt	ggcaggtctt	2040
tggctacagc	ctgccctttg	acccagattg	ctatccggga	cttaattctc.	cagttggact	2100 -
acccatatac	tcaaggttcc	caggactctg	cactcttgca	gctcattgag	ctcagggacc	2160
gggtgaacca	gctttctcca	cctggcaaag	tccgacttga	ccttttctcc	tgcttgctcc	2220
ggcatcggct	taagctggcc	aacaatgagg	tgggcaggat	ccagtcctcc	ctgagggctt	2280
tcaattctaa	gctgccaaac	cctgtggaat	atgagaccgg	caaactctgt	agctaatggg	2340
cagcccactt	cagcactggg	caaggaggg	atccatgaat	ctggggtaca	aagataatct	2400
aagccctcac	cttagtgcca	acagggtgtg	ctcccacgag	actttcagca	tccagtagat	2460
gggacetega	ggctcgagct	gaagcaggcg	agagagaaac	agctactgcg	tgcgtgcgcg	2520
cacgcataca	cacacacaca	cacacactgg	cacagggagg	ctacaactaa	gcagcctcag	2580
acctgtaaag	ttgattggtg	ctttctaaaa	tgaatgcaat	tgaaagaaag	gagccaagga	2640
agagattaag	aaaaagaacc	agctgaacca	tgaaacaaac	aaaaatccta	aaagtgattc	2700
ttgtcattca	agaaagcaag	aggggacaac	aatgggaggg	gtcggagctc	ttcccttccc	2760
ccctgtggag	tcacttttgt	attettttta	accagatttc	ttaaaatgtt	gttgttttgt	2820
yaateetgae	attggttctt	acttttgtat	gctgcctcct	ctgtgccctc	ccagacgctg	2880
actgggaaac	acaagaagta	caaccaacag	gaaccagcgc	caagggcagg	cagcggcctc	2940
cttgctcccc	tcccttactc	ctccctctgc	tgcctcctcc	ccccaccaag	tttcagggcc	3000
ciggattgtt	cccagttccc	artgtggtcc	cttcagaget	cctttccaac	agcatctctc	3060
tgtcgaagaa	agaagctctg	tcaagttaga	gagagacaat	gtgtaggaaa	tgttctttt	3120
Laaaaaaaaa	taacaaaaac	aaaacaaaac	tatttatttt	gggattgttt	tccttgttaa	3180
cetgetecaa	ccacctgaac	acctaagtaa	acatttatct	ggtttaaaaa	aaaaa	3235
			•			

```
<211> 847
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (848)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (824) ... (226)
<223> similar to gi4972706 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3346 ttttttttt ttcactgttg agaaaattt attatcaatg tctcagagcc aacgacgaca 60 cgaacctaca tgaacacaac tcttaattta ggacccaagg gtgactgtaa acatgatagg 120 agcgctggga cattgtcact gaggcagaca gcagccacta gtccacaatg gtttaaaaag 180 tragtrettyt georgetear tygaagette cattetygge catetycaga tatteettyt 240 agagettete etgageeteg aagagettet teagettett ggettgeeet ttgetgaget 300 etttgeeete catgteatgt gtgggeagae catttteate aaacttggag tatttgtegg 360 tttctgacaa gaacatctca ctggggggaa tcttcatctt ggccagcttt gctgcttctt 420 gttcctgttt cctccgggcc gcctcctctt tcttcttcct cttctcctct tcaacccgtc 480 tetttette tetetettt aataaggtgt ttetgtetae eagttteace aetgtgggea 540 gtcettcgtg gtcttcaaac cgcaccccaa gctcgggcag gatgttgtcc cgcagggcat 600 cgctgagctg cagaatctca gggacttttt gctctcgggc aatcttccgc actccttctc 660 ggaattetga taacacetga aggtagggca tgactgtgge etegaaactg aggeatgtta 720 ccagcccata cgaaccggaa atngccagag agctgtcctc ttctaccggc cccaaagatc 780 tcacacatat ggtgaggtac aaggcgatgt tcttcaacaa gagctgggtg ggaccttttc 840 cttcacq 847

```
<210> 3347
<211> 648
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (639)...(287)
<223> similar to gill96431 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3347

ttttttttt ttattctgc tagtcacaaa gcccaacttt ttattgaagt ataacataca 60
cacagaaaag tgcccagatc aaaagtgtac agctccaaga atgttcacaa acggaaagca 120
cccaggtaac cgggcaacca gatcaagaaa cagaacacc caggaagcac cacctcatgc 180
```

```
ececttetgg ttactgtett ettagggaet gatetetaet tggeaacege atgggatgga
                                                                      240
attttggctg ggttttaaac tttatataaa tggaatccta tggtgcattt ttgccttatc
                                                                      300
tegtteaaca etagggttgg tgaatacaet ecaagttggg ggtggagttg cageteatte
                                                                      360
ccattgcagt ctgggattcc atcgtgtgaa tataccctaa tgtgcttatc cagccaacat
                                                                      420
gggcattggg gtgctttcct gttcggggtt attatggaga gtgtttttgt gaagatttag
                                                                      480
agcatgtete tggatgaaca catgtacaca tttetgtagg gtatacacet aggggtggaa
                                                                      540
ttgttaggtc atatatattt acatccaact caagctcttt catgaaagaa gaaagaatqt
                                                                      600
actggatgga gtttgctggc tcaaagaatt gacagaaaac tagaaggg
                                                                      648
```

```
<210> 3348
<211> 4205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4206)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(2067)
<223> similar to gi4240265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3348
ggagaactcc accgggctat gcgaacagaa tcctgcgaag aggatggcat tccctgtgga
                                                                       60
tatgctggaa aattgcagcc atgaggaatt ggaaaattct gctgaagatt acatgtcaga
                                                                      120
tttaaggtgt ggggaccctg aaaatccaga gtgtttttct cttctcaata ttacgattcc
                                                                      180
tattageetg teaaatgtag getttgtaee tetttatggt ggagateaga eecagaaaat
                                                                      240
tettgetete tittgeacetg aagatteact gaeagetgtg geactitace titgetgatea
                                                                      300
gtggtgggct attgatgata ttgtgaaaac atctgttcct tcaagagagg ggcttaagca
                                                                      360
ggtgagcact cttggggaga gagtggttct gtatgttctg aatcgaatta tttatagaaa
                                                                      420
acaggaaatg gagagaaatg agatcccatt cctgtgtcat agcagtactg attatgctaa
                                                                      480
gattctgtgg aagaaaggag aggccattgg gttttattca gttaagccta caggaagcat
                                                                      540
atgtgeetet tttettaece aaagttaeca attgeeagtt ettgataeaa tgtttetaag
                                                                      600
aaagaaatac agaggtaaag attttgggct tcacatgctg gaggactttg ttgattcctt
                                                                      660
tacagaagat gcgcttggct tgcggtatcc actgtcttct ctcatgtata cagcttgcaa
                                                                      720
gcaatacttt gagaagtatc caggagacca tgaactcctt tgggaagttg aaggtgttgg
                                                                      780
acactggtac cagcgaatac cagtcaccag agcattacaa agagaagcac ttaaaattct
                                                                      840
agcactttct caaaatgaac ctaaaagacc tatgtctgga gaatatggtc ctgcatctgt
                                                                      900
tccagaatac gaagcaagaa ctgaagacaa tcagtctagt gagatgcagc taactattga
                                                                      960
ttctctaaaa gatgcctttg caagcacttc cgaaggtcat gataaaacat ctgtttccac
                                                                     1020
tcatactcga agtggtaatc taaagcggcc aaagattgga aagcggtttc aggattctga
                                                                     1080
atttagcagt totcaaggtg aagatgaaaa gacctcccag acttcactta cagcttcaat
                                                                     1140
aaacaaattg gagtctactg cacgcccatc agagagctca gaagaattcc tggaagaaga
                                                                     1200
acctgaacag agagggattg aatttgagga tgaaagcagt gatagagatg cacggccagc
                                                                     1260
actggaaacc cagccacagc aagagaagca agatggtgaa aaggaatctg aattagagcc
                                                                     1320
tatgaatggt gagataatgg acgattetet taagacetea ettataacag aagaggaaga
                                                                     1380
ctccactagt gaagttttag atgaagaatt aaaattgcag ccttttaatt ccagtgaaga
```

```
ctctacaaat cttgttccac tggtggtaga atcttcaaaa ccccctgagg tagatqcacc
                                                                     1500
agataagacc ccacgtatac ctgactcaga aatgttgatg gatgaaggca catctgatga
                                                                     1560
aaaggggcac atggaagaga aattgtccct acttccaaga aagaaagcac atcttgggag
                                                                     1620
ttcagacaat gttgctacta tgtcaaatga agaacgatct gatggtggtt ttccaaactc
                                                                     1680
tgtgataget gaatttteeg aaggaacegg tetetgagaa ttttteteet aataetaett
                                                                     1740
ccctccattg gaagaccagg gtgaggaggg ggtatctgag ccccaggaaa catctactgc
                                                                     1800
ttetteetee agagttettt tgatagaggt tgaactttgn aagaegtgee aattttteae
                                                                     1860
agaatgcagg accagaagaa tcagtcagag gagcagtctg aagcatcttc cgagcaactg
                                                                     1920
gatcagttta cacaatcggc agaaaaagct gtggatagca gctcagagga aatagaagtg
                                                                     1980
gaagtgcctg tggtagacag gcggaattta agaagaaagg ccaaagggca taaaggacct
                                                                     2040
gctaagaaga aagctaagct gacctgaagg aagaagaaag tggatgataa atcctcttct
                                                                     2100
ttgtaacata gttgttgttt ttaaaatatg gtaattaata aacagcatgg ggcacaggac
                                                                     2160
aaaaatttcc aaaatttcaa tttgaactta cttactatgc agttttttgc ttccctttag
                                                                     2220
aacgtagaat tcaccattgt ttttaatttt ccaggctatt tttggtaaat gcaattttt
                                                                     2280
atttttatta accatgtttc aattttggga aaccagatca tattatattt tctttatcag
                                                                     2340
gtggtacatc tgaccattat ttcaaaaata taattaaaaa gctgtggaaa gtagtaggat
                                                                     2400
ttccattact tataaggatc acagaaatct tttatactaa gggttttaat agtaaaactt
                                                                     2460
ggtgagggtt ctagaagttt taaatttcaa aactaatcac caatttttta aaatgtaggc
                                                                     2520
atgcctaaac aaaaataagt gtcaataaat tagaaaaaat ataacttcaa gtaaatgaga
                                                                     2580
gcacaaaaac agaaacttac ggtcaaaggt tcatgaagat attttggttt tggcctctta
                                                                     2640
atcctagata tagatgcagt tttttccttt gacttcacta tctatggaaa ggtacacata
                                                                     2700
aaatctgttt ctgattcatt ctatcatctg atgttaacag tactgtcagg gatttaactg
                                                                     2760
tggcatgtgg ggactaatta tttaaaattt catttgaagt attagtttgc tgtaattttt
                                                                     2820
tttgtctgca tatgtgcaga cgcctagaag tttagacttt cacctttaat caggtaaaaa
                                                                     2880
tcacaactat actttggaga catggtttaa tttggacttc tggtcctgat cagatagata
                                                                     2940
aattaaactg gagattttac ttttatccca acccagttaa catctatatt tcagaagtat
                                                                     3000
gaggeteett cetaaggeat eteettaaat ettgecacet eectaattet acagtettat
                                                                     3060
ttatattccc ccacagettt catctacttc tgtaactcat ggagtgattc tccaatcaac
                                                                     3120
agatetteet geetgeegge ttatgeeett gatgteeatt tittgggtagg tittggaggtg
                                                                     3180
caccccacaa tgttagacct atatggcagg agtaaaactg cccccagtgt tagacctata
                                                                     3240
tggcaggggt aaactgcctt tgggggagct gtggttacaa gggcttcaat catattggag
                                                                     3300
gcttcaatca tcctttgatt tgtactgagt actggttgca agctggcctg ttaagtatat
                                                                     3360
attgtgttgc cataacaaag gcctaggaaa atttgaagaa aaaaaacact gaactgttat
                                                                     3420
tttttgtaat ttatttaaaa atggacaaaa tggttattag aatccaaaga taatctaaaa
                                                                     3480
acagttctac tctttggaaa tattatgtgt actcaaattt gcacttaagt tggagaatgt
                                                                     3540
tttgagacca tttaaattgt tttaaaaata gcttgatctt gatccttatg caaaaqaaac
                                                                     3600
taagactttg tgtcattatt tgaggtagct aaggactgat gttgaaagtg tattcagtct
                                                                     3660
atagtaaget gatgteaggt eagtaaaatt ttgtttgggg atgttggtat tttcgateaa
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gttaaaatct taaagcagac aaaaatatgt aaacgctcct atttgtgtta gattttgaac
                                                                     3780
aattgtatta ccctatattt tctttaatta gtcaaaggta agccagatta tttcattcta
                                                                     3840
aatgaaaatt aaagcacttt ggccatttat tttttcaaca aatgctaata ctaaqtaaaa
                                                                     3900
aaaaaaaagt atgactacta ttagtcaatt taccaaacat ttatgctgtt ttatacattt
                                                                     3960
tatgaaaaac ttctgtcaat atcacaaagg gaaatactct gttaaqattc aqtaaattct
                                                                     4020
taatctttac atgttccatt tcttaaattt gaaaacactt gtaaatattt aatttttact
                                                                     4080
tggatttgtt taaaatactt tcttttcaaa ttattttaaa catggaaacg cttcatgaat
                                                                     4140
ttgggtcatc cttgcacagg ggccatgcta attttccctg aattggtcta attttagtat
                                                                     4200
                                                                     4205
```

<210> 3349

<211> 9831

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(6791)
<223> similar to gi3894265 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
ttttttttt tttatttta tatttttat ttttatttt tcctttttag agaggggtc
                                                                       60
togotatgtt goocagactg ttttototoc tttaattttt ttgcatocco cagttaattt
                                                                      120
caatacccac ccccccct taccctagct cggggagtgc cacgggagag accttgccat
                                                                      180
gttgcctgtt aaccttggca tacagtaagc gctaacaagt gattacaaat atcaaaataa
                                                                      240
acacacagg cgccgccctc tgagcccgcc cccgctgact tgctccccag gtgtttcctg
                                                                      300
ctgaatgaga ttgagaagga ggagaaggag aagctctggt actactctca gctgcagggc
                                                                      360
ctgtccaage geetggaega getgeegeae gtggagaege agttetegat geagatggae
                                                                      420
ctgatccggc agcagcttga gttcgaggcc cagcacatcc gctcgctgat ggaggagcgc
                                                                      480
ttcggcacct cggacgagat ggtgcagcgg gcacagatcc gcgcctcgcg cctggagcag
                                                                      540
attgacaagg agctgctgga ggcgcaggac cgagtgcagc agacggagcc ccaggccttg
                                                                      600
ctggcggtga agtcggtgcc ggtggacgag gaccccgaga cagaggtccc cacacacct
                                                                      660
gaggatggca cccctcagcc gggcaacagc aaggtggagg tggtcttctg gctgttgtcc
                                                                      720
atgttggcga cgcgcgacca ggaggataca gcgcgcacgc tgctggccat gtccagctcg
                                                                      780
ecegagaget gegtggeeat gegeegeteg ggetgtetge etetgetget geaaateete
                                                                      840
caeggcaceg aggecgegge egggggtege geeggggeec eaggggeace gggegecaag
                                                                      900
gacgcacgca tgcgcgccaa cgcggcgctg cacaacatcg tcttctcgca gccggaccag
                                                                      960
ggcctggcgc gcaaggagat gcgcgtcctg cacgtgctgg agcagatccg ggcctactgc
                                                                    1020
gagacetget gggactgget geaggeeega gaeggeggge eegagggagg tggeeegge
                                                                     1080
agegeeeega teeceatega geegeagate tgeeaggeea cetgtgetgt tatgaagetg
                                                                     1140
teetttgatg aggagtaceg cegtgecatg aacgagetag gtgggetgea ggeegtggea
                                                                     1200
gagetgetge aggttgaeta tgagatgeac aagatgaece gggaeceget gaacetggeg
                                                                     1260
ctgcgccgct acgcgggcat gaccctcacc aacctcacct ttggggacgt tgccaacaag
                                                                     1320
gccaccctgt gtgcgccc cggctgcatg gaggccatcg tggcccagct ggcctccgac
                                                                     1380
agtgaggage tecaceaggt ggtgtecage atcettegga aettgteetg gagggeegae
                                                                     1440
atcaacagca agaaggtgct gagggaggcg ggcagcgtga ctgccctggt gcagtgtgtc
                                                                     1500
ctgcgggcca ccaaggagtc caccctgaag agcgtgctga gcgccctgtg gaatctgtct
                                                                     1560
gcacacagca cagagaacaa ggcggccatc tgccaggtgg atggcgccct gggcttcctg
                                                                     1620
gtgagcaccc tgacctacaa gtgtcagagc aactcgctgg ccatcatcga gagcggcggc
                                                                     1680
ggcatectec geaatgtgte cageetegte gecaceegtg aggaetacag geaggtgete
                                                                     1740
cgggatcaca actgttctgc agacgctgct gcagcatctg acttcgcaca gcctgaccat
                                                                     1800
egtgageaac gegtgeggea egetetggaa eetgteggee egeagegeee gtgaeeagga
                                                                     1860
gctgctgtgg gacctgggcg ccgtgggcat gctgcgtaat ctggtgcact ccaagcacaa
                                                                     1920
gatgategee atgggeageg eegeegeeet gegeaacetg etggeecate ggeeegeeaa
                                                                     1980
gcaccaggeg gccgccaccg ccgtgtcccc aggcagetgc gtgcccagcc tgtacgtgcg
                                                                     2040
caagcagcgg gcgctggagg ccgagctgga cgcacggcac ctcgcgcagg cgctggagca
                                                                     2100
cctggagaag cagggcccgc cggcagccga ggccgccact aagaagccgc tgccgccct
                                                                     2160
gegacacetg gaeggeetgg eccaagacta tgetteegat tegggetget ttgaegaega
                                                                     2220
cgatgcaccg tcatccctgg ctgcggccgc ggccaccggg gagccagcca gccctgccgc
                                                                     2280
getgteeete tteetgggea geeeetteet geaggggeag gegetggete geaeeegee
                                                                     2340
caccegeega ggeggeaagg aggeagagaa ggacaceagt ggggaggeag eegtggegge
                                                                     2400
caaggccaag gccaagctgg cgcttgcagt ggcgcgcatc gaccagctgg tggaggacat
                                                                     2460
ctccgccctg cacacctcgt ccgacgatag cttcagcctc agctctggag acccgggaca
                                                                     2520
ggaggcgcca cgggagggcc gcgcccagtc ctgctcgcca tgccgcggcc cggagggcgg
                                                                    2580
gcggcgagag gcaggaagcc gggcgcaccc gctgctgcgg ctcaaggcgg cccacgccag
                                                                    2640
cctctccaac gacagcctca acagcggcag tgccagcgac gggtactgcc cacgcgaaca
                                                                    2700
tatgetgeec tgeeegetgg eegeaetgge ttegegeege gaggaeecea ggtgtgggea
                                                                    2760
geoteggece ageoggettg accttgacet geooggetge caggeogage coccggoog
                                                                    2820
```

```
cgaggecace teegeegaeg eeegegtgeg caccateaag etgtegeeta eetateagea
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cgtgccactg cttgagggtg cctcaagggc gggtgcagag cccctcgcgg ggcctggaat
                                                                    2940
ctctccaggg gcccggaagc aggcctggct gccggcagac cacctgagca aggttcccga
                                                                    3000
gaagctggcg getgeecege tgtetgtgge cageaaggea etgeagaaac tggeggegea
                                                                    3060
agaggggcca ctctcgctgt cccgatgcag ctccctttcc tcgctgtcct cggccggccg
                                                                    3120
eccaggeece agegagggtg gtgacetgga tgacagtgac tectecetgg aggggetgga
                                                                    3180
ggaggccggc cccagcgagg ctgagctgga cagcacgtgg cgggcgcccg gggccacctc
                                                                    3240
gctgcccgta gccattccgg ctccccggcg taaccgaggc cggggcctgg gggtggaaga
                                                                    3300
cgccacgccg tccagctcgt cggagaacta cgtgcaggag acaccgcttg tgctgagccg
                                                                    3360
etgeagetet gtgagetege tgggeägett egagageeeg teeategeea geteeateee
                                                                    3420
cagtgaacct tgcagcggc agggcagcgg caccatcagc cctagcgagc tgcccgacag
                                                                    3480
ccccggacag accatgcctc ccagccggag caagacgcca ccgctggcgc ccgcgccaca
                                                                    3540
gggtccccc gaggccaccc agttcagcct gcagtgggag agctacgtga agcgcttcct
                                                                    3600
ggacatcgcc gactgccggg agcgctgccg gctgccatct gagctggacg caggcagcgt
                                                                    3660
gegetttace gtggagaage cagacgagaa ettetegtge geetecagee teagegeget
                                                                    3720
ggccttgcac gagcactacg tgcagcagga cgtggagctg cggctgctgc cctcggcctg.
                                                                    3780
ccccgagcgc ggcgggggcg ccgggggcgc cggcctccat tttgcagggc accggcggcg
                                                                    3840
ggaggagggg ccggcgccca cgggttctcg ccctcgcggc gccgcggacc aggagctgga
                                                                    3900
actgctgcgg gagtgcctgg gagccgccgt gcctgcccgg ctgcgcaagg tggcctccgc
                                                                    3960
gctggtgcca ggtcgccgcg cactccccgt gcccgtctac atgttggtgc ccgcccggc
                                                                    4020
eceggeecag gaggaegaet cetgeactga eteegeggag ggeaegeegg teaaettete
                                                                    4080
tagcgccgcc tcgctcagcg acgagacgct gcagggaccc cccagggacc agcccggggg
                                                                    4140
accageggge aggeaaagae ceaeeggeeg eeceaeetet geeagaeagg ceatggggea
                                                                    4200
ccggcacaag gcgggaggcg ccggccgcag cgcggagcag tctcggggcg cgggcaagaa
                                                                    4260
ccgagcaggg ctggagctgc ccctgggccg gcccccgagc gcccccgcag acaaggacgg
                                                                    4320
etcaaagece ggeeggaece geggggaegg ggegetecag tegetgtgee teaegaegee
                                                                    4380
cactgaggag geogtgtact gettetacgg caacgacteg gacgaggage ceceggegge
                                                                    4440
cgcgcccacg ccaacccacc ggcgcacatc ggccatccct cgcgctttta cgcgggagcg
                                                                    4500
teegeaggge eggaaggagg eccetgeece gteeaagget geaceagetg eccegeegee
                                                                    4560
egeceggace cageécagee teattgetga egagaceeeg ceetgetaet ecetgagete
                                                                    4620
ctccgccagc tccctcagcg agcccgagcc ctcggagccg ccggccgtcc atccacgagg
                                                                    4680
ccgggagccc gcggtcacca aggacccggg cccaggaggc ggacgcgaca gctcgcccag
                                                                    4740
ecegegggee geggaggage ttetgeageg gtgeateage teggeeetge eeaggegeeg
                                                                    4800
gccccccgtg tctggcctgc ggcgccgcaa gccccgagcc acccggctgg atgagcggcc
                                                                    4860
cgcagaggg tcccgggaac gcggcgagga ggcagcgggc tcggaccggg cctccgacct
                                                                    4920
ggatagcgtg gagtggcgcg ccatccagga gggcgccaat tcaattgtca cgtggctgca
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ccaggiagea gitgecacge gggaggeete gteegagtee gaetecatee tgteettegt
                                                                    5040
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                                                                    5100
ggaggagaa atgggcagtg cccggcggcc agagaaaagg ggcgcagcct cagtcaagac
                                                                    5160
cagegggage eccegitece etgeaggeee egagaageea egitggeaeae agaagaeeae
                                                                    5220
gcccggggtg ccagctgtgc tccggggacg aacagtgatc tacgtcccca gcccggcacc
                                                                    5280
ccgtgcccag cccaaaggga cccccggccc ccgcgccaca ccgcggaagg tggcgcccc
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ttgcctggca cagcccgcgg ctccagccaa agtcccgagc cccgggcagc agcggtcgcg
                                                                    5400
gagectacae eggeetgeea agacetegga getggegaeg etgagecage ecceeagaag
                                                                    5460
egecacaceg ecegecegee tegecaagae ececteetee ageteeteee agacetegee
                                                                    5520
egecteecag ecectgeeca gaaagegeee eeeggteace eaggetgetg gggeectqee
                                                                    5580
cggccccgga gcctccccgg tgcccaaaac gccggcgcgc acccttctgg cgaagcagca
                                                                    5640
caagacgcag agategeeeg tgeggateee gtteatgeag aggeeggeee ggegtgggee
                                                                    5700
gecacegetg getegggeag teeeggagee gggeeeeagg ggeegggegg ggaeegagge
                                                                    5760
gggcccgggg gcgcgcgggg gccgcctggg cctggtgcgt gtggcctcag ccctctccag
                                                                   5820
cggcagcgag tectccgacc getcgggett ccggcgacag ctaacettca tcaaggagte
                                                                    5880
geoggettg eggegeegee geteegaget gteeteggee gagteegegg cetetgeece
                                                                    5940
ccagggegee tegeceegee geggeeggee egegetgeee geegtettee tetgeteete
                                                                    6000
gegetgegaa gageteegag eggeaceeeg geagggeeeg geeeeggeee ggeageggee
                                                                    6060
eccegeggee egaceeagee etggegageg ecctgeeegg egeaceacet eegagageee
                                                                    6120
6180
gctgccgcac atcagcgtgg cccgcaggcc cgacggcgcc gtccccgcgg cccctgcctc
                                                                   6240
```

```
agccgacgcc gcgcgccgca gcagcgacgg ggagccccgg ccgctcccca gggtggccgc
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gccgggcacg acctggcggc gcatccgaga tgaggacgtg ccccacatcc tgcgcagcac
                                                                     6360
getteeegee aeggeeetge caetgegggg etceaegeee gaggaegeee eggeegggee
                                                                     6420
.cc.cgccgcgc aagaccagcg acgccgtggt ccagaccgag gaggtcgccg cccccaagac
                                                                     6480
caactccagc acgtccccga gcctggagac cagggagccc cccgggggccc ccgccggcgg
                                                                     6540
ccagctetee etecteggea gegacgtgga eggteceage etegecaagg eteceatete
                                                                     6600
cgcaccette gtgcacgagg gcctgggggt cgccgtgggg ggcttccccg ccagccggca
                                                                     6660
eggeteece ageegetegg ecegagtace eceetteaac tatgtgeeca geeceatggt
                                                                     6720
ggtcgcagcc accaccgact cggccgcgga gaaagccccg gccactgcct ccgccaccct
                                                                     6780
cctggaatag tggcctaggc cggccttctg gaacgttctc tcccggccct gcggcgcgt
                                                                     6840
etggetgeee catgggeetg egetgtagae gteeeceata ggtegeeeea gggeetetge
                                                                     6900
ccaccegage eccaccaete teagaaceee egeecagege aeggegaeet egegeeteae
                                                                     6960
eggaagaeet tgeetetgtg eegeggaggt eeaggaggaa aeggggegge egetaggeet
                                                                     7020
caagteeega eegtggageg etggeaaggg egteetggee eageeetgag egegeggeee
                                                                     7080
ttcccctgtc ggaagccgtt gcttgacccc gggcgaggga ggcggtagcc tccgggtccg
                                                                     7140
ggtctgggtc tgggtccgct gcttcgcagg gacagcgctg gggaggtgac ggcgcccgcc
                                                                     7200
gcaggtgggg cgaggctggg ggagggcggc gccgcggcgg gcctgccagc tgggggcctt
                                                                     7260
tgcggcgcgc aggggcgaag cctgtaatca ctgcagccgc cggtaattcg ctaatgaggg
                                                                     7320
ctttgcaggg attgttttca ttctcagccc cagctgtggg agtgcgggtg ggggtgtggc
                                                                     7380
cgagccccgg caggaagccc cgcccagacg gtgttcaggg aacccggagc ccaagcgctc
                                                                     7440
cggcggagcc caaaagggtg gggtgggag gggcagaggc caacggatcc ccctgcctgt
                                                                     7500
cgcacccctt ggcgggagac gggaaggcag cgggctgcgt acgatgggac cctggtgcag
                                                                     7560
acgccgggcc ggctgacatt tggaccccat cccagaggag atgctggcta ccagctgggg
                                                                     7620
cgaccccaag ggtcgctgga gtcagtatcg gcccggcgca gccgcggcgg gcgaggccaa
                                                                     7680
tggaaaggag actgagggga gtcccggcag tgagcccgag gccctgggac ctggagcccg
                                                                     7740
cgctggcctc tccccagegg agcctgcacg ttacggagac catcacatgt gggcgtggtc
                                                                     7800
agtgcccagg accgcaccgc tgctcatctt gtcccttttc aattcccttc tggttcatga
                                                                     .7860
tgcataaagc gctaggccct agaactccag aaacagcaca gctggggcgg ggacccagcc
                                                                     7920
ttgccctcca cccgaggctc tgggacaagg cgggaggttc gggggccttc cggcaggtga
                                                                     7980
acgcagggct ggagagtatt tggtgccaga tgaggtgaaa gcttatagaa gggcctgagg
                                                                     8040
ggctcggctg cctcatcccc tggcggggga ggctgggagc tgggcctcct gcgtggggtg
                                                                     8100
ggactcgcag gggccgggtc tccgtgactg gggcaacgcc tcgtcctgca gagggagccg
                                                                     8160
acgacetett ttetgeagaa aageteeage aggegetgee tteacceaeg gatetgeeea
                                                                     8220
ggctgaaggc acaegeteaa tgccccaegt geetteteea ggaggaacga agcagggttt
                                                                     8280
gagggttggg tggatggagc tcagaaggaa accccagccc caccacggat gacaccatcc
                                                                     8340
ctcccgtccc atccccagca tgggcaaggc cagcctttct ggcagaagga gctgtcctca
                                                                     8400
actcagggcc gctgtgagca aagctgaccc cagcccccac ccccagttaa cactgctgct
                                                                     8460
tetetgaatg catgteacge tgeaccecat geteegggee cacaccetge aggacaagga
                                                                     8520
getecagaca ggaegtecat aagteacega ggtgtgecae ceageaggtg etggaggtge
                                                                     8580
ecaatgetee etectaggae etegeageea ggeaaggetg teaggttgtt ttqqqqqaaq
                                                                     8640
agggggtcat ggatggctga gcagagagcg gggaaaatgc aggctgagtg gggcgacctc
                                                                     8700
ctgcctgcca ggagccccct ttcaggacac agcgggggtc tcacacttgc tgtccccatc
                                                                     8760
catggcccga gggggaacct ggtggtctct tctgagcttt tggacttggg gatgccaaac
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acgtgeteae ecteacaete geeceggeee getgegeece taattgeeaa agggtaggga
                                                                     8880
aatggcgaag ccagccacca ggtcgctggt gacagggcca gggttatgca ggaaggtggt
                                                                     8940
geggeattge ettecacata tgtaagtete tgggeggege ceteceaget eeetgeetet
                                                                     9000
gtttccccat gtgggccgtg gggaactccc agagctacct cttgggggag cgtggtggca
                                                                     9060
gcgatgatgg ggagacgcct ggaagctcac agaacttggg tctggctggc tcctgcccgt
                                                                     9120
gacgeettge ccagcageaa ggtgegeaac atggetgeea geecegeete ccacceccae
                                                                     9180
ecegagteet gageteactt tegeettete cateceetge egtgggggee acagecacae
                                                                     9240
ctcaccgccc agtccagctg tctccagaag gggacaggca gtccgcggtc tctggacaat
                                                                     9300
caactcaagg tacgcccact gcaaggcctc cctcccaccg cggcccctgc ctggccacct
                                                                     9360
ggcctctctg caccagggtg acaaggggtc ctcgtctgcc ccccaatgct ccagggccag
                                                                     9420
tectaaggag etgagggtet gaggacgeag ggagggtgga ggtgteetga ggetgatgga
                                                                     9480
cagtgaccgc cactggcccc caacatgacc acacgtgggt gctgaactcg gggcgccgtg
                                                                     9540
cccaccggca tggtcctccc gagctccgac agcattacct cacccggccc catctgttgc
                                                                     9600
eccggtecag ecctgatgge gegegeetgg tetgtetgat teccetagee gecaceceae
                                                                     9660
```

```
gtttctgtac cgggtctctg cagtgttaaa cggacgtgta aatagtggta aatagtgaaa 9720
gcctgtcctt ccctaaatgt aaagccatct gtccggcgta aggacgacac cgtcagctgt 9780
ccgactcgca cacatttaat aaactgagct cttgcattgc caaaaaaaaa a 9831
```

```
<210> 3350
<211> 2056
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(1399)

'<223> similar to gi2739460 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3350
aattatgtta gatggccggg tgcggtggct cacgcctgta atctcagcac tttgggaggc
                                                                       60
cgagatggaa gacgtcatag cacggatgca agatgaaaaa aatggaattc ctattcgtac
                                                                      120
ggtcaaaage tttettteea agatacetag egtettetet ggtteagaca ttgtteaatg
                                                                      180
gttgataaag aacttaacta tagaagatcc agtggaggcg ctccatttgg gaacattaat
                                                                      240
ggctgcccac ggctacttct ttccaatctc agatcatgtc ctcacactca aggatgatgg
                                                                      300
caccttttac cggtttcaaa ccccctattt ttggccatca aattgttggg agccggaaaa
                                                                      360
cacagattat gccgtttacc tctgcaagag aacaatgcaa aacaaggcac gactggagct
                                                                      420
cgcagactat gaggctgaga gcctggccag gctgcagaga gcatttgccc ggaaqtqqqa
                                                                      480
gttcattttc atgcaagcag aagcacaagc aaaagtggac aagaagagag acaagattga
                                                                      540
aaggaagate ettgacagee aagagagage gttetgggae gtgcacagge eegtgeetgg
                                                                      600
atgtgtaaat acaactgaag tggacattaa gaagtcatcc agaatgagaa acccccacaa
                                                                      660
aacacggaag tetgtetatg gtttacaaaa tgatattaga agtcacagte etacccacac
                                                                      720
acccacacca gaaactaaac ctccaacaga agatgagtta caacaacaga taaaatattg
                                                                      780
gcaaatacag ttagatagac atcggttaaa aatgtcaaaa gtcgctgaca gtctactaag
                                                                      840
ttacacggaa cagtatttag aatacgaccc gtttcttttg ccacctgacc cttctaaccc
                                                                      900
atggctgtcc gatgacacca ctttctggga acttgaggca agcaaagaac cgagccagca
                                                                      960
gagggtaaaa cgatggggtt ttggcatgga cgaggcattg aaagacccag ttgggagaga
                                                                     1020
acagtteett aaatttetag agteagaatt eageteggaa aatttaagat tetggetgge
                                                                     1080
agtggaggac ctgaaaaaga ggcctattaa agaagtaccc tcaagagttc aggaaatatg
                                                                     1140
gcaagagttt ctggctcccg gagcccccag tgctattaac ttggattcca agagttatga
                                                                     1200
caaaaccaca cagaacgtga aggaacctgg acgatacaca tttgaagatg ctcaggagca
                                                                     1260
catttacaaa ctgatgaaaa gtgattcata cccacgtttt ataagatcca gtgcctatca
                                                                     1320
ggagetteta caggeaaaga aaagagggga aateteteac gtecaagagg ttaacaagee
                                                                     1380
ttgctcagtc ttactaaacg gatcatcttg tagcatgaat gcagactgga gtcactgcac
                                                                     1440
acactttgta gctcaatgtt gtgacctgga gcagaggaca ttagaacaag atgttgcatg
                                                                     1500
agcaaaggac ctaaattgtt atttttgtgt gtacattcca tctccaatgg actcttccgt
                                                                     1560
ctcaatgcct ccattccaaa ctgttgtctg ctttctttct ccttctacta tgctggatct
                                                                     1620
gtgtctcttc ctttttaaca agttcaagtg aagtaaaacc ttttctttt ttccttctt
                                                                     1680
ctctctctct ctctctcaaa gcttcagtta gacacacagt tcactgaaaa ttcagtcagt
                                                                     1740
caaaaactgg aagaactgta aaagaaaaaa gtatatatca ataagtatac atgtggcttc
                                                                     1800
acatttatta aacaataaat toogcacaga aagtttoatt toaccaatgt gtoacagtoa
                                                                     1860
gaaacaaact catgtetteg gtetgttgte tgtacattet eegttaatgt ttetegeatt
                                                                     1920
tatttttata ccatatttaa agaagaaaca ccttttactc caaatgtatt aaagttgatc
                                                                     1980
ccttctctgt aaatttgtgt atgtttatat tgttgtttta tctttcatta aaagatgtca
                                                                     2040
```

```
<210> 3351
<211> 3247
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3249)...(973)
<223> similar to gi6002189 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3351
ttgacgetet ggecatgggt tgtgcaaaga aagettttta tttgagaaca eetagataet
                                                                       60
tttggaaatg ttcttgttgg atcacaaaca acctaattga cagtctatcg ccaacatcca
                                                                      120
caaacacage aaacagteea gteetgeaga ceacacaggg tacatetaga gggttetaet
                                                                      180
tgcatcaccc acacttccac tcctgtgaaa caactgtctt gggcatgaga agggccagga
                                                                      240
taggccaggt gaatggcagg ctgcccaaca accccaatcc caaaccaacc tcccaggcca
                                                                      300
tgggcccaag tccctgcagg aagatgctaa taggtacaac aggtagaaca tgtagacaca
                                                                      360
aacatctagt ttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt
                                                                      420
caagtgccct aagaaatcct cctggattca atgacaacac atcaatggcc gggcacaggg
                                                                      480
ttggattcct tttatgaaat caccttataa tctctcatca tcccagggac agtgcctttt
                                                                      540
gggactgcat gaatctttaa tagctacacc acattttctc atcctttaag ttatgacaga
                                                                      600
caggitatet etetecaaga geateaggit aggatgetet ticaetetta caaactgica
                                                                      660
ggtgggaggg ggaatcaccg acatcatttc attaaataac tgtgggagtc tggggatgct
                                                                      720
gggctggaag gcatctccag gggagggact gggaggggcg attttgctaa aaggggctgc
                                                                      780
teactgette attiteactg geatgeeege titteteact tigggtiggg gagtitgaag
                                                                      840
gaccatgtaa tcacagagat tagagctccc tgtgaaattc aatcactgcc tttaggatct
                                                                      900
eccacaaaga cetggteete ecaatageae atgegtttee tetgtgaget gtattegeat
                                                                      960
ccagcgccgg agccctcaga aagaatgcgt gtttacactc tgtactctcc aatgggtaat
                                                                     1020
atttatcata gaaatctaat acatattett cagtettgaa tecaaaette tggtacagta
                                                                     1080
gcatagcggg gttgcttgct gagacgtaaa gcgctcacgt ccttgcccat gcaggtctga
                                                                     1140
atcagatgat agatcatgaa agttgcaatc cctgctcttc tccattcagg gtggacgaac
                                                                     1200
agaaatgaaa tgtaagcttc attgtatttc acatcaggaa ccatgaagcc aaaggcaatg
                                                                     1260
atgacttttt tataaagaac aacaacactg aagtctgggt actgcagaca ctcagcacag
                                                                     1320
gtcaatgcca ggccaaaaaa actcctgaca catggagttg atcgttggga tgtgatttgg
                                                                    1380
ccgcacataa cagtaatcga gaggtgcgtc gggctccggc gtccagtgag ggtcgctcct
                                                                     1440
gatataaggt ttcaagatcc gagaggtata agggctgaca atactctggt ccacagccat
                                                                     1500
atcttctgat cctaccaagc gatacaaaaa cttggtggtc ctggtgtccg aaaacccttc
                                                                     1560
ctggacggca aaggaagtct ggtatcggtc aaggattctg aagtcctgac aggtggttct
                                                                     1620
gtacgtggct tgtccagctg gaagtctgga aattcctcct tctttggctc cataaatccc
                                                                     1680
gtcaactaac aaaagagcag cattaacaac ttgatccaag tcaaaaagtg gtaatccct
                                                                     1740
atcccttttc gcttgtctga caatcagttt gcgtttcagt ctccgagctt ccggagtcat
                                                                     1800
ggcaacagca ccgggacaag cttccagcct cttgagcagc agcttttcct cgtagatgct
                                                                     1860
cacgggagta tacctggget ettteggett tgtgteette tecagetgag getteetett
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ttctctagcc cttgtttgca aagatgtgtt tgaatctgtg tcttcactgt caatatccat
                                                                     1980
cetgtegggt ttttectect cactetetac etcetgettt atetgtteag ggeetetgae
                                                                     2040
cttctttctg accccaacca ctggcccaga agctactgac ccagcagggg gtgggacqta
                                                                     2100
ctccatccct gggtctatga ctccatcgcc ttccatctca tcgtcatcat gaaacaaggc
                                                                     2160
```

```
ttgtgggggc atcacatctg gaatcagatc tgcttctgaa agcaagctag gtgtggcaga
                                                                     2220
atgagaggca ggtgtaccag gggcagagaa atccagagaa ggagaaggag atgggcttgt
                                                                     2280
cagcggggtg cggtcagagg agctcaagga ggaaaagtca atcacttcgc ctttttccag
                                                                     2340
aatcacatet ggeetgegge eteggettat gaattttaca ggggtagaag atgtgeteet
                                                                     2400
gtcaagaaag ccagcggcct ccttctgggc tcttctaatg tcttttgctt cctgagttcg
                                                                     2460
agaccttttc tcttttaatt ccatggcaga ttccacagga ttccgacttg ctcgtttct
                                                                     2520
aagtccctca acagtaatga tgggatctaa agttggtttt gaggctttta ttttcaaagt
                                                                     2580
agaggcagac aacttetete etteaggttt categttggg ggettgttat gaacaagttt
                                                                     2640
ccaccatcct ggctctccaa attcctgagc acctgaacgg aagtacatgg gacttcccac
                                                                     2700
gctgaggcaa cctgccacgg tgctccacca ggtagacgtc tttttcctat tccctagtaa
                                                                     2760
aaaagtccaa tgtttctcaa taaaagcaca gatatcttct ttccacctga aataaccttg
                                                                     2820
acgtccactt ccttccagag acaagttgta cattgccaac atgacgacct gctgccatgt
                                                                     2880
cagetteage ettteataet geteettgee atetgetgag caateegaae aagtaaacet
                                                                     2940
aaaaaaatta tcacccttaa ggtaactgag ctgttccctc agctgactgg ctggtatcca
                                                                     3000
tttttggcac ttgtcacaga agtaggacag ctgctcctcc atccaagaca cgtctccttc
                                                                     3060
atcactgttg agggaatccc cactctggtc gtgcgataag tccactgatg cctgatcctc
                                                                     3120
ggattcgacg atcaggagcg tetetecete caettcacet teetecagte ettetgaggt
                                                                     3180
cgatgttctc gtggcttcgt catcatgccg actgatcaga ctactcaggt ggatgctact
                                                                     3240
atccatc
                                                                     3247
```

```
<210> 3352
<211> 1194
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1106)...(253)
<223> similar to gi1408211 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3352
tattcggcac gagccgagct ttacacagcc ctctgtattt attagacaaa agagcgagaa
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                                                                   120
agactgcatc ctttggacaa taggcactaa ttttctcagt agataacttc aaggagccca
                                                                   180
gtgccaggga gtgatgtccc tcagcaaacc ttttggtggc agggcagtga gtttgctcac
                                                                   240
atcctgcatt catgataaac agtttgctgt ttgatcatat agcctccagc agaatgctga
                                                                   300
gttggtcacg tcccacaggc ctttggctcc ctgcatatcc ccctttctgt ttatgtatta
                                                                   360
attgaaagaa tgtaaggctg ggctgggagg ctctcattct ccaattggtg gtccatccga
                                                                   420
ttttacagac ttatatctgc tgccggcaga ctcttcccag ggtccccttt cgccttgtca
                                                                   480 <sup>′</sup>
atticagite etetgeteca geagacette ticatteaeg teetigaagt eccatgittg
                                                                   540
gatgctgcta gttgggcgtg cttggagtcc ctgttctggt tgccatttgt aacctgcacg
                                                                   600
gacctaggtg gactaaacaa aggggggtga acacgggaat aaagatgaga caaaagagtg
                                                                   660
tatttggaag aagggatcgg gggcgctttg cctctagggg acaagggccc tgagctttac
                                                                   720
acagccctcc gtatttatta ggcaaaagag ataggagggt ggggggggt ggaagaaggg
                                                                   780
gtcggctgct cagttcagag taggcttgca agactgcatt ctctagatgt cgcagtagat
                                                                   840
aaccteggtg ceagggagtg attgeeteea geaaacetta tgttggeagg ageagteetg
                                                                   900
agtttgctca catcacgaaa acatgataaa cagtttgctg tttgatcata tagcctccag
                                                                   960
cagaatgctg agtttggtca cgtcccacca ggcctttggc tccctgcata tccccctttc
                                                                  1020
1080
```

```
<210> 3353
<211> 2535
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (90)...(646)
<223> similar to gi6003574 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3353 aagaagacaa aaaaggaagc tggaaataag aaatccacac cagttagcat tctttttqqt tatccactct ctgagcgaaa acagatggca cttcttatgc agatgacagc aagagacaac 120 agtccagatt ccacaccaaa tcatccatca caaacaacgc ctgcccaaaa gaaaactccc 180 agttetteat etegacagaa agataaagtt aataaaagaa atgaaegtgg tgaaaeteet 240 ttacacatgg ctgctattcg aggagatgtg aaacaagtta aagaattaat aagtttaggg 300 gcaaatgtga atgtgaaaga ttttgcaggt tggacaccac tgcatgaagc ttgcaatgtt 360 ggatattacg atgttgctaa gatacttata gcagctggag cagatgttaa cacacaagga 420 ttagatgatg acactccact ccatgattct gctagtagtg ggcacagaga tatagtaaag 480 ctgttacttc gtcacggtgg aaatccattt caagctaata aacatgggga gcgtccagtg 540 gatgtagcag aaacagagga gttggagttg ctactaaaaa gagaggtgcc tttatctgat 600 gatgatgaaa gttacacaga ttccgaagag gctcaatctg taaatccttc tagtgttgat 660 gaaaatattg actctgaaac agagaaagac tctctcatct gtgaaagtaa acagatactt 720 cccagtaaaa cacctcttcc atctgccctt gatgagtatg agttcaaaga tgatgatgat 780 gaagaaatta ataagatgat tgatgatagg catattetta ggaaagaaca acgaaaagaa 840 aatgaacctg aagcagaaaa aactcattta tttgcaaaac aggagaaagc cttctatcct 900 aaatcattta aaagtaaaaa acaaaagcca tctagggtct tatattcaag tactgaaagt .960 tetgatgaag aagetettea gaataaaaag atttetaett catgtteegt catecetgaa 1020 acatcaaatt ctgatatgca aaccaaaaag gaatatgtag tttcaggtga acacaaacag 1080 aaaggcaaag ttaaaagaaa attgaaaaat cagaataaaa ataaagagaa ccaagagcta 1140 aagcaagaaa aggaaggaaa agaaaataca agaataacaa acttgacagt aaatactgga 1200 ctagattgtt cagaaaagac cagagaggag gggaacttta ggaaatcttt taqcccaaaa 1260 gatgatactt cattacattt atttcatatt tccactggta aatctcccaa acattcttgt 1320 ggattaagtg aaaaacagtc aacaccacta aaacaagaac atactaaaac atgtttatca 1380 ccaggaagtt ctgaaatgtc attacagcct gatcttgttc ggtatgataa tacagaatct 1440 gaattettge cagaaagtte aagtgtaaaa tettgtaage ataaggaaaa aagcaaacat 1500 cagaaagatt tccacttaga atttggtgaa aaatcaaatg ccaaaataaa ggatgaagat 1560 catagtecaa catttgaaaa tteagattge acaetgaaaa aaatggataa agaaggtaaa 1620 acattaaaaa aacataaatt gaagcataaa gagagggaaa aagaaaagca taaaaaagaa 1680 attgaaggtg aaaaggaaaa atacaaaact aaggatagtg ccaaagaact gcagaggagt 1740 gtggaatttg atagagaatt ttggaaagag aattttttta aaagtgatga aactgaagat 1800 ctctttttaa atatggaaca tgaatcctta acattagaaa aaaaatcaaa attggaaaaa 1860 aacatcaaag atgataaatc aaccaaggaa aagcatgtgt caaaagagag gaactttaaa 1920 gaggaacgag acaagattaa aaaggaaagc gagaaatctt ttagggagga aaaaataaaa 1980 gatctaaaag aagagagaa aaacataccc acagataaag actcagaatt tacttctttg 2040 ggtatgagtg ccattgagga atctataggg cttcatttag tggaaaagga aatagacatt 2100

```
gaaaaacaag aaaagcatat aaaggaaagt aaagaaaaac ctgagaagcg atctcaaatt
                                                                     2160
aaagaaaagg acattgagaa gatggaaaga aaaacctttg aaaaagaaaa gaagataaaa
                                                                     2220
catgagcata agtcagaaaa agacaaatta gatcttagtg aatgtgttga taaaaaaaaa
                                                                     2280
aaaaaggaca agctatattc gcatcacaca gaaaaatgcc ataaagaagg tgagaagagc
                                                                     2340
aaaaatactg ctgctattaa aaaaactgac gacagaaggg aaaagtagag aaaagatgga
                                                                     2400
taggaaacat gacaaagaaa agcctgaaaa agagaggcat ctagcagaaa gcaaagaaaa
                                                                     2460
gcacttgatg gagaaaaaa aataaacaat cagataatag tgaatacagt aaatcagaaa
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aaggcaaaaa aaaaa
                                                                     2535
```

```
<210> 3354
<211> 7399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(6150)
<223> similar to gi2224543 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 3354 aagcggcctg tatagataca ggagcaggaa ctctaggaca gccctgagtg aagaggagga 60 ggaagaacgg gagttcagaa aacagttccc cctgcatgaa aaggactttg cagatatttt 120 ggtgcagcca acgttggagg agaacaaagg aacttcagat gggcaagaag aggaagcagg 180 cacaaaccca geteteetet eccagaatte aatgeaggea gtaatgetga tacaccagea 240 attgtgtctc aactttgctc gatccctctg gtatcaacag actctgccgc cacatgaagc 300 aaagcattac etcageetgt ttetgtettg etateagaet ggggeatege ttgtgaeaea 360 cttctacccc ctgatgggag ttgaactgaa tgaccgactc ttgggcagcc aacttttggc 420 ctgtaccete teccataaca etettttgg ggaggeacee teagacetga tggtgaaace 480 tgatgggccc tatgacttct accagcatcc caatgttcca gaagcacggc agtgtcaacc 540 tgtgcttcaa ggtttctcag aggctgtcag tcacttgcta caggactggc cagaacaccc 600 agegettgaa cageteetgg ttgtaatgga cagaattegt agttteecac tttecagtee 660 catctcaaag ttcctgaatg gcttagagat ccttctggca aaggcacagg attgggagga 720 aaatgcaagt cgagctttgt ctttgcggaa acatcttgat ttgatcagtc agatgatcat 780 tcggtggcgt aaactggagc tgaactgctg gtccatgagt ttggataata ctatgaagcg 840 ccacaccgag aaatccacca agcactggtt ctccatctat cagatgcttg agaagcacat 900 gcaggaacaa acagaagaac aggaagatga caaacagatg accttgatgt tgctggtcag 960 cacattacaa gcatttattg aaggatcctc gctgggagag ttccatgtgc gacttcagat 1020 gttactggtt ttccattgtc atgtcttgct gatgccacag gttgaaggaa aggattcact 1080 ttgcagtgtt ctatggaatt tgtaccatta ttacaagcaa ttctttgacc gggtccaggc 1140 caaaattgtg gaacttcgtt cccccctaga aaaagaactt aaagaatttg ttaagatttc 1200 caagtggaat gatgtcagct tctggtccat taagcaatct gtagaaaaga cacacaggac 1260 actetttaaa tteatgaaga aatttgaage agteetgagt gaaceetgee ggteateeet 1320 ggtggagagt gacaaggaag aacagcctga ctttttgccc aggccaacag atggagctgc 1380 aagtgaactg tettecatte agaatetgaa cagggcactg agggagacee tgttageeca 1440 accagcaget gggcaggcca caattccaga gtggtgtcag ggcgctgctc cttccggctt 1500 ggaaggggag cttctgcgtc gcttgccaaa gctcaggaaa cgcatgagga agatgtgcct 1560 gacgttcatg aaggagagcc ccctgcctcg ccttgtggag ggccttgatc agttcacagg 1620 tgaagtgatt teetetgtga gtgagetgea gagettaaag gtggaaceet etgeagagaa 1680 ggagaagcag cggtcagaag ccaagcacat tctcatgcaa aaacagcgag ctttgtcaga 1740

```
cctctttaaa caccttgcaa aaattggttt gtcgtatcgc aaaggtcttg cttgggcccg
                                                                      1800
ttcaaaaaac cetcaagaga tgetteatet teacceatta gateteeaga gegeattgte
                                                                      1860
categicage ageacteagg aggetgatte taggetgett acagaaatet egtetteatg
                                                                      1920
ggatggatgc cagaagtatt tttatcgctc tcttgcacgg catgccaggc ttaacgcagc
                                                                      1980
actagcaact cctgccaagg aaatgggcat gggcaacgtg gagaggtgca gagggttctc
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agcacatttg atgaagatgd togtoogada goggogotoc otgaccacgo toagtgagda
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gccccaggcc taccccgtgg ccttcccccc tcaggatggc gtgcagcagt ggacagagcg
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cotgoageac otggocatgo agtgocagat cotgottgag cagototoot ggotootoca
                                                                     2280
gtgctgcccc agtgtagggc cagctccagg ccatggcaat gtccaggtac tggggcagcc
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gtcccaggtg tcagttcatt tgcagggcct agagtccttg ttcattcttc cagggatgga
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ggttgagcaa agagactcac aaatggcact agttgaaagt ctggaatatg taagaggaga
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ccaaggagga aatcaaatgt tggacgaagg atttgtggaa gatttttcag agcaaatgga
                                                                     2880
aattgccatc cgagccatcc tctgtgccat ccagaactta gaagaaagaa agaatgaaaa
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agcagaggag aacactgacc aagcaagccc acaagaagat tatgcaggct ttgagagact
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gcaatcagga catctaacaa aactcttaga ggatgacttc tgggccgatg tgagcacttt
                                                                     3060
gcacgtgcag aaaataattt ctgccatctc cgagctgttg gagaggctga aatcgtacgg
                                                                     3120
tgaggatggc acagcagcaa agcacctgtt cttcagccaa tcctgttcct tgctggtgcg
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cctggtgccg gtcctctcca gctactcaga cctcgtcctc ttcttcctga ccatgtcttt
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tgcccagaag ggattttgct tgcccaaaga atttatggaa gattcagctg gagagggagc
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aactgagttc catgactatg agggaggtgg aattggagaa ggcgagggca tgaaggatgt
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ggaagctgac aaactagatg agaggctttg gggtgatgat gatgaggagg aagatgagga
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ggaagaagac aataaaactg aagaaacagg accaggaatg gatgaggaag attctgaact
                                                                     3780
tgttgctaaa gatgacaact tggatagtgg caattcaaac aaagataaaa gccagcaaga
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taagaaggaa gaaaaggaag aagcagaagc tgatgatggt ggacaaggtg aagacaaaat
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                                                                     4080
ggagataaaa gaaaaaccag aagaagcagg tcatgaagct gaggaaagag gagagaccga
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gaccgaccag aacgaaagtc agagtccaca ggagcctgag gaaggcccca gtgaagatga
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caaggcagaa ggggaagagg aaatggacac aggagctgat gaccaagatg gagatgctgc
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tcagcateet gaagaacaet etgaggagea geageagtet gtggaggaaa aagacaagga
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agecgatgaa gaaggtggag agaatggeee tgetgaecaa ggttteeage eecaggagga
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agaagaacgg gaggactctg atacagagga gcaggtgcca gaggctttgg agaggaagga
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gcatgcctcc tgtgggcaga ctggtgtgga gaacatgcag aacacacagg ccatggagct
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ggctggggcc gcacctgaga aggagcaggg gaaagaggaa cacggaagtg gagctgcaga
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tgcaaaccag gcagaaggcc atgaatcgaa tttcattgcc cagttggcct cccagaagca
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caccaggaaa aacacacaga gttttaagag gaaacctggg caggctgaca atgaacgttc
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catgggtgat cacaatgagc gtgtgcacaa gaggctgagg actgtggata cggacagcca
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tgccgagcag gggccagctc agcagccca ggcccaggtg gaggatgcag atgcattcga
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gcacattaaa caaggcagtg acgcatacga tgcacagacc tatgatgtgg ccagcaaaga
                                                                     4860
acagcaacag tetgcaaaag actetggcaa agateaggaa gaggaggaga tagaggacae
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ccttatggac acagaggagc aggaggagtt caaagcagca gacgtggagc agctgaagcc
                                                                     4980
agaggaaatc aagtegggea ceacageace ettgggettt gatgagatgg aagtggagat
                                                                     5040
ccaaactgtt aaaacagagg aagaccaaga ccccagaaca gacaaagccc ataaggagac
                                                                     5100
agaaaatgag aaaccagaaa gaagccgaga gtctaccatt catacagctc atcaattcct
                                                                     5160
```

```
catggacacg atcttccagc cctttttaaa agatgtcaat gagctaagac aqqaqctqqa
                                                                     5220
gagacagctg gaaatgtggc agccacgtga atctggaaac ccagaggagg agaaggttgc
                                                                     5280
agctgagatg tggcagagtt acctgatctt aacagcgcct ctttcacaac ggttatqtqa
                                                                     5340
agagettegt eteatattag ageetaceea ggeageeaag etgaaaggag aetategaae
                                                                     5400
tgggaaacga ctaaacatac ggaaagtcat tccatacatt gctagtcaat ttcggaaaga
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caagatttgg cttcgaagga ccaagcccag taaacgccag tatcagattt gtttggctat
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cgatgactet tetagtatgg tagacaatca taccaagcag gtttgcattt gaatetttgg
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ctgtgattgg aaatgctcta accetectgg aagtgggtca gattgcagtg tgtagttttg
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gagaatetgt aaagetgtta cacceattte atgageagtt cagtgattae tetgggteee
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agattctacg tctctgcaaa ttccaacaaa agaaaaccaa gattgctcag tttctagagt
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ctgttgccaa catgtttgca gctgctcagc agctctcgca gaacatcagt tcagaaactg
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cacaactect cetggtagte tetgatggge gaggeetttt cettgaggge aaagaaagag
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tectgggeag cagtteagge tgeeeggaat geaaatatet ttgteatett tgttgtattg
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gacaatccca gttcacggga ttctatcttg gacattaaag taccgatatt taaaggacct
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gggagagatg cctgaaatcc gatcctacat gggaagagtt cccattccca ttactatatc
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attettegag gatgtaaacg cactteetga gacacteage gatgeeetca gacagtggtt
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tgagttggtg acagcctctg accacccata gaacagaaag aagagtccaa agtgagactt
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aactgtggtc agaaggtcac attgcttacc caggtgctcc cttttggaca actacaaaaa
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attttattgt aatattttta ttttacaacg tgatcttaca gcctacagaa tgctctctgg
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ctcccggctt tgcctgggct gaggttttta taccaaacct ggaagcagca gcaggtgcct
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gaactcgtaa ctagagaaga gttatccttc ttccctgcct tggaagccct ggcctgggag
                                                                     6420
gaggtcatac cccaccgttg gagcccagct gcctgttttc ttttgcaggg gatctgggca
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cctgtgcctt gaggagatgc tgccaggagc atgggactct gacagtcctt tgtataaagg
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actaaaggga gctgcccttt tgaccctgtt ctaagctctg ccttgccaag cccatagtgt
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gtgcccaaaa gctgtcaagt ggccaagaca gctcgtttct ggagagtatg agggtgtgtt
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ttcttattgt gaaaggaact accttctctt agagggtagg aagaatgtgg gtgtgtgtt
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gttctcataa agcaactgga cattataggt gcccaggtca tctataaaaa cgatccttgg
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gctgtgtaaa aatgaagtgg cttttcagta tcctctttca cacttgctgc ttcgggagac
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tatgcaatga tgggaaggtg attgcccctt tatttcattc agtgccatgg tccctgttgt
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tgtagtaatt tatttgttta gttcattttt ttttttctta acagtcaagg ggaagagtga
                                                                     6960
ttcctcacac tgctttcaag ctggactgag ccagtctcat tctgggaaag aaacgctgtg
                                                                     7020
tecagaacte ageageteea tetattttt ecagtegaaa aaaactgate tatetttagg
                                                                     7080
cagtttttac ttggccagaa agcagtgctg aatacttgaa actgggggct ctgttcctac
                                                                     7140
ttaatgttet gtecagaatg tteettttgt aggeagtatg teeatgatgt aateateeta
                                                                     7200
teteettgte tgttteecaa gttacaetgt gaagtetgeg accettttga ggtggteate
                                                                     7260
aaagacacag attoottgtt taaccaagtg toocaaagca tgtacctgaa gttatatcat
                                                                     7320
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                                                                     7380
ttgttgatgt aaaaaaaa
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```

```
<210> 3355
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (119)...(1000)
<223> similar to gi577276 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3355
tatatcaaca ttgatataga tccagggtac ttaaaaaacag ccttaggcct ttatagaagc
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                                                                      120
aaagagattt cccagaggtc cacagccaca atgtatataa ttggaggcta ttactggcat
                                                                      180
cetttateag aggiteacat atgggateet tigacaaatg titggatica gggageagaa
                                                                      240
ataccagatt ataccaggga gagctatggt gttacatgtt taggacccaa catttatgta
                                                                      300
actgggggct acaggacgga taacatagaa gctcttgaca cagtgtggat ctataacagt
                                                                      360
gaaagtgatg aatggacaga aggtttgcca atgctcaatg ccaggtatta ccactgtgca
                                                                      420
gtcaccttgg gtggctgtgt ctatgcttta ggtggttaca gaaaaggggc tccagcagaa
                                                                      480
gaggctgagt tctatgatcc tttaaaagag aagtggattc ctattgcaaa catgattaaa
                                                                      540
ggtgtgggaa atgctactgc ctgtgtctta catgatgtta tctacgtcat tqqtqqccac
                                                                      600
tgtggctaca gaggaagctg cacctatgac aaagttcaga gctacaattc cgatatcatc
                                                                      660
gaatggagcc tcatcacctt cagtccacat ccagaatatg gattgtgctc agttccgttt
                                                                      720
gaaaataagc tctatctagt cggtggacaa actacaatca cagaatgcta tgaccctgaa
                                                                      780
caaaatgaat ggagagagat agctcccatg atggaaagga ggatggagtg cggtgccgtc
                                                                      840
atcatgaatg gatgtattta tgtcactgga ggatactcct actcaaaggg aacgtatctt
                                                                      900
cagagcattg agaaatatga tccagatctt aataagtggg aaatagtggg taatcttccc
                                                                      960
agtgccatgc ggtctcatgg gtgtgtttgt gtgtataatg tctaattgaa tctgcagaaa
                                                                     1020
tgaccaagca atcacttttt tggagtatag ttttataaaa aaagaatgca gggtttgaag
                                                                     1080
ttccttacct gataattgtg tctggcacat gataggggat cagtaaattg taattcctaa
                                                                     1140
ccctactgta ctcccaaaca tggtgattca tggtcaagaa aaatcttata tatatatatg
                                                                     1200
tacacacata tatatgtgtt catatatatg tatacatata tgtgtatata tacgcatgta
                                                                     1260
tgtatacata tatgtgtata tatgcgcatg tatgtatgca tatgtgtgta tatatgcgta
                                                                     1320
tgtatgtata catgtgtgta tatatacgta tgtatgtatg catatgtgtg tgtatatacc
                                                                     1380
```

```
<400> 3356
cccaactgtg tcaaccgaga tctgatagac aaggcagcaa tggatttttg catgaacatg
                                                                       60
aacacaaaag caaacaggaa gaagttggta cgggcactct tcatagttcc tagacaaagg
                                                                      120
ttggatttgc taccatttta tgcaagattg gttgctacat tgcatccctg catgtctqat
                                                                      180
gtagcagagg atctttgttc catgctgagg ggggatttca gatttcatgt acggaaaaag
                                                                      240
gaccagatca atattgaaac aaagaataaa actgttcgtt ttataggaga actaactaag
                                                                     .. 300
tttaagatgt tcaccaaaaa tgacacactg cattgtttaa agatgcttct gtcagacttc
                                                                      360
teteateace atattgaaat ggeatgeace etgetggaga eatgtggaeg gtttetttte
                                                                      420
agatetecag aateteacet gaggaceagt gtaettttgg ageaaatgat gagaaagaag
                                                                      480
```

caagcaatgc	atcttgatgc	gagatacgtc	acaatggtag	agaatgcata	ttactactgc	540
				ctcctctcca		600
cggaaacttt	tgtacaagga	tctctctaag	gttaccaccg	agaaggtttt	gagacagatg	660
				ttatttgttg		720
atctggaatg	tgaaatataa	tagtattcat	tgtgtagcca	acctcttagc	aggactagtg	780
ctctaccaag	aggatgttgg	gatccacgtt	gtggatggag	tgttagcaag	gtattcgatt	840
				atcagcagtg		900
				attttcagaa		960
ttttacctca	tttggtgtta	atcctgatgg	ctctccaagt	tccctggacc	cacctgagca	1020
				tgtggccagt		1080
				tttcagcgtt		1140
gaagaaaagt	ttggaggttt	ggacaaaaga	ccatccattt	cctattgata	tagattacat	1200
					ctctggaaga	1260
				ataaaactag		1320
tgacaaagac	tcaaaagatt	ctatgacaga	aggagaaaat	cttgaagagg	atgaagaaga	1380
agaagaaggt	ggggctgaaa	cagaagaaca	atctggaaat	gaaagtgaag	taaatgagcc	1440
agaagaagag	gagggttctg	ataatgatga	tgatgaggga	gaagaagagg	aggaagagaa	1500
tacagattac	cttacagatt	ccaataagga	aaatgaaacc	gatgaagaga	atactgaggt	1560
aatgattaaa	ggcggtggac	ttaagcatgt	accttgtgta	gaagatgagg	acttcattca	1620
agctctggat	aaaatgatgc	tagaaaatct	acagcaacga	agtggtgaat	ctgttaaagt	1680
gcaccaacta	gatgttgcca	ttcctttgca	tctcaaaagc	cagctgagga	aagggccccc	1740
actgggaggt	ggggaaggag	aggctgagtc	tgcaaacaca	atgccgtttg	tcatgttaac	1800
aagaaaaggc	aataaacagc	agtttaagat	ccttaatgta	cccatgtcct	ctcaacttgc	1860
				aggatgagaa		1920
cacactagat	atcaatgaac	ggcaagaaca	agaagattat	caagaaatgt	tgcagtctct	1980
tgcacagcgc	ccagctccag	caaacaccaa	tcgtgagagg	cggcctcgct	accaacatcc	2040
				gggaggagac		2100
				ggttagtgga		2160
aattgaatga	gagcagtgga	cacatctcag	caggtcggtc	tagagagttg	cgaatctaaa	2220
cctgggacag	gctggggcca	ggaggcagaa	acaccagect	ctgccaacac	cggaacaagc	2280
cgacgcttcc	agacaaggcg	gaaaaggcct	tttgtaatgg	aaatctcgcg	agggttaatc	2340
ttctcttgag	aatggcagtc	aagaaatgag	atggttcact	tgactactga	gcagttacac	2400
caaggagagc	gtgaaggaga	tgattgagcc	agagaagaaa	cgggttgtga	tggtaatggt	2460
gtgggggaaa	tgaacttgag	ctttaaactt	gatttgagtt	tcagtgtctc	tgaattgaac	2520
atcccacgtt	ggaagaagat	acatttgggg	gctccaggac	tacagtagaa	aagtatagag	. 2580
caagcaggaa	aatcttctag	taaaacttac	atgcaggaca	acaaaatgat	gaaagatatc	2640
caaataccag	ataatccacc	aggaaggctt	ttgtttagga	atttgtttca	agaggaacaa	2700
				tgctataaaa		2760
				agcattaatt		2820
agaaaagtga	taccagccca	agaacaggga	tctaggtgag	cccattgtaa	gtatcattga.	2880
aaacaaaaca	tgcccgtcaa	catgtcacag	aaaacgaacg	aaggacaaca	agaagtggat	2940
gagaatattt	tgttgacctt	catgggttta	cagcctctgt	ctctaaacaa	agtatggaaa	3000
caagtagagç	ttttattttg	cttttgtttt	tgttttgttt	tttttttgt	tttcccccac	3060
caaacagaaa	tgagggtcct	tagtctgttt	ctgacaatct	gttaatttct	taggacagct	3120
gcctttggtt	tgctttccag	caggcgtagt	atatttagtc	ggagagcaca	tctgtatgcg	3180
acaacttgat	tacatctttt	tttctagcta	ttttgcattt	tttcttttac	catgtttcag	3240
tttctgcatg	Lagatttaaa	taaaaaacaa	aacttgtaaa	gttgtaacat	ttcacatgga	3300
aatgctgccc	aatcttcacc	agcttcagaa	atctgacctt	tgccgatgct	gcaataaagt	3360
gctgtaattt	adaaaaaaaa	acaacccatt	accaaacata	annttgtgcc	cccctgggg	3420
gggggccat	tttaatagcc	gctcctttcc	cccccctacg	ttatatatgg	gtttttata	3479
•		•				

<210> 3357 <211> 2578

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2579)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(2204)
<223> similar to gi791043 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3357
aaactcagtg gacgacccta cagacacatg ggagtgcttg gaacttcaaa actctatgac
                                                                       60
atteggaaaa etatetttae ttteaeteea eagtttatag accageaaca gttetaeetg
                                                                      120
getetggaea acaagatgat agtggaaatg ettagaacag aceteteeta eetetgtage
                                                                      180
cgctggcgga tgacaggcca gcccaccatc accttcccca tctcacacag catgcttgat
                                                                      240
gaagatggaa caagcttgaa ttcaagtatc ctggcagcac tccgaaaaat gcaagatggg
                                                                      300
tattttggtg gggcaagggt tcaaacaggt aaattgtcag agtttttgac aacatcttgt
                                                                      360
tgcacacact tgagcttcat ggaccctgga cctgagggta agctgtacag tgaagattat
                                                                      420
gatgacaact atgattacct ggaatctggc aactggatga atgattatga ttcaaccagt
                                                                      480
catgeteget gtggtgatga agttgetegt tatttagate acettttgge geacactget
                                                                      540
ccccatccta aactagcccc tacctcacag aagggagggc tagatcggtt ccaagctgct
                                                                      600
gtgcaaacaa cctgcgactt aatgtccttg gtgaccaagg ccaaggaact gcatgtacag
                                                                      660
aatgttcaca tgtatcttcc tacgaagtta tttcaggctt cccggccttc attcaactta
                                                                      720
cttgattcac ctcatccccg acaggagaac caggttccct ctgttcgtgt agaaatacat
                                                                      780
cttcctagag accagtctgg ggaggtggac tttaaagcac tggttttaca gttgaaggag
                                                                      840
acctcaaget tacaggaaca agetgatate etetatatge tgtatactat gaaaggacet
                                                                      900
gactggaaca ctgaattgta taatgaacgg agtgctacag tgagagagct tcttaccgag
                                                                      960
ctgtatggca aagtgggaga aattcgtcac tggggcctga tccgatacat ttctgggatc
                                                                     1020
ttaaggaaga aagtggaagc acttgatgag gcctgcacag accttctctc ccaccagaaa
                                                                     1080
catttgacag taggacttcc tccagaacct cgagaaaaga ctatctctgc acctctgccc
                                                                     1140
tatgaggege teacteaget gatagatgaa gecagtgaag gggatatgag cattteaate
                                                                     1200
cttacacagg aaataatggt atatctagcc atgtatatgc gaacccagcc tggcctcttt
                                                                     1260
gctgaaatgt ttcgacttcg aattggtctg atcatacaag ttatggcaac agaactggcc
                                                                     1320
cactcccttc gatgctcage tgaggaagee acagagggee tgatgaatet cagtectteg
                                                                     1380
gccatgaaga atctcctgca tcacattctc agcggcaagg agtttggagt ggaacgaaag
                                                                     1440
ccgttcgtcc cactgattca aatgtcagtc ctgctatttc tatccacgag attggtgctg
                                                                     1500
ttggagcaac caaaacagaa cgaactggga tcatgcagtt aaaaagtgag ataaagcagg
                                                                     1560
tggaatttcg tagactgtca atctcagctg agagtcagtc acctggaacc tctatgactc
                                                                     1620
caagtagtgg gtcctttcct agtgcatatg atcagcagtc atctaaagat agtcgtcaag
                                                                     1680
gtcaatggca acgccgaaga aggctggatg gggcactgaa tagagttcca gttggatttt
                                                                     1740
atcagaaagt atggaaagtt ttgcagaagt gtcacggact ttctgttgaa gggtttgtcc
                                                                     1800
ttccttcctc taccactaga gagatgactc caggtgagat taaattctct gttcatgtgg
                                                                     1860
agtettgtee tgaatgtgtt acttegeeea gagtacegte agetgetggt tgaageeate
                                                                     1920
cttgtcctca ccatgctggc agatattgaa attcatagca tcggaagcat cattgctgtg
                                                                     1980
gaaaaaatag tgcatattgc caatgacttg ttccttcaag aacagaaaac ccttgggcnc
                                                                     2040
agatgatacc atgttggcaa aggatcccgc atctgggcat ctgtactctt cgggtatgac
                                                                     2100
agtgcaccca gtggcaggtt tggcaccatg acctacctct cccagggcag ccggccacct
                                                                     2160
acgtgcagga gttcctgccc ccacagcatc tgtgccatgc aatgagggct ttggttcctg
                                                                     2220
gettetggga geettttgae agetggteee tgeetegggt ggattgtgea tggaactaaa
                                                                     2280
atgttattgc ctaaccaatc caaccegtgc ccctttctgt cccatccttc ccaagaagag
                                                                     2340
```

```
agaacttttt cgataaacta actactgtag aagaagtgaa cacttacctg gaggctcacc
                                                                     2400
ttgcagaacc agtgacaatc ttatgagtat aatgaacact cagccaggcc tgtcatgatt
ggetttattt ettteateat teataaaagt ttgeatgtgt ttttattete tagatetgtt
                                                                     2520
accaatatag ttttctaact cctgtttggg gagcaagtgt taaaaaaaac ttattcct
                                                                     2578
     <210> 3358
     <211> 342
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (344)...(24)
     <223> similar to gi699581 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3358
cttgagtaca cagaccaggg tatgcgggca cgtgagaggc tgctgatgat ttatatcttc
                                                                       60
cattgtgagg gaggacttgc ttggtcttat aatatctagc caaacatgtg aatccggctc
                                                                      120
tctataacaa tcacacggaa cttatgatcc ttatactttc tgatcctatc aagatgcttt
                                                                      180
cgaacagcaa ctgctttctt aagtacttgg tgcagatctt caagaagatc aggagcatga
                                                                      240
teettagaet taagaattet tageatgata ttgeetgtea caaaaegtae ttgtgeaaca
                                                                      300
ccatgtgaat ctctcatgat tacaccgatc tgtgaaggag ta
                                                                      342
     <210> 3359
     <211> 2666
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(2666)
    <223> similar to gi5257005 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

<400> 3359 ggatcacctg gcaaaaagga agagaaggcc aagaacaaag aatcactttg catggaaaac 60 agtagcaaca gctcttcaga tgaagatgaa gaagaaacaa aagcaaagat gacaccaact 120 aagaaataca atggtttgga ggaaaaaaga aaatctctac ggacaactgg tttctattca 180 ggattttcag aagtggcaga aaaaaggatt aaacttttaa ataactctga tgaaagactt 240 caaaacagca gggccaaaga tcgaaaagat gtctggtcaa gtattcaggg acagtggcct 300 aaaaaaacgc tgaaagagg tttttcagac tctgatactg aggctgcagc ttccccaccg 360 catcctgccc cagaggaggg ggtggcagag gagtcactgc agactgtggc tgaagaggag

```
agttgttcac ccagtgtaga actagaaaaa ccacctccag tcaatgtcga tagtaaaccc
                                                                       480
 attgaagaaa aaacagtaga ggtcaatgac agaaaagcag aatttccaag tagtggcagt
                                                                       540
 aatttcagtg cttaaatacc ccttccttac ttacacctga atcgccttca tcagtcactg
                                                                       600
 taacagaaag gcagccggca gcagtcttct gtaacagtat cagaaccact ggctccaaac
                                                                       660
 caagaagagg ttcgaagtat caagagtgaa actgatagca caattgaggt ggatagtgtt
                                                                       720
 gctggggagc tccaagacct ccagtctgaa agggaatagc tcgccagcag gttttgatgc
                                                                       780
 cagtgtgagc tcaagcagta gtaatcagcc agaaccagaa catcctgaaa aagcctgtac
                                                                       840
 aggtcagaaa agagtgaaag atgctcaggg aggaggaagt tcatcaaaaa agcagaaaag
                                                                       900
 aagccataaa gcaacagtgg taaacaacaa aaagaaggga aaaggcacaa atagtagtga
                                                                       960
 tagtgaagaa ctttcagctg gtgaaagtat aactaagagt cagccagtca aatcagtttc
                                                                      1020
 cactggaatg aagteteata gtaceaaate teeegeaaqq acqeaqtete caqqaaaatq
                                                                      1080
 tggaaagaat ggtgataagg atcctgatct caaqqaaccc aqtaatcqat tacccaaaqt
                                                                      1140
 ttacaaatgg agttttcaga tgtcggacct ggaaaatatg acaagtgccg aacgcatcac
                                                                      1200
aattottoaa gaaaaactto aagaaatcag aaaacattat otgtoattaa aatotgaagt
                                                                      1260
agcttccatt gatcggagga gaaagcgttt aaagaagaaa gagagagaaa gtgctqctac
                                                                      1320
atcctcatcc tcctcttcac cttcatccag ttccataaca gctgctgtta tgttaacttt
                                                                     1380
agctgaaccg tcaatgtcca gcgcatcaca aaatggaatg tcagttgagt gcaggtgaca
                                                                      1440
gcaggacttg ctaaagcact ttgcacttaa tggctgttga gggccacttt ttttttatac
                                                                      1500
tgcacagtgg cacaaaaaaa tatcagacaa gcactatttt atatttaaaa attgtttctt
                                                                     1560
gacaagetga ettggcaett aagtgeaett ttttatgaag aaaaagtaca atgaaetget
                                                                     1620
tttcctcaag caataattgt ttccaacttg tctgggaatt gtgtgtctgg taactggaag
                                                                     1680
geetteeact gtggeaaatg gaggetttte actgeetgta gagacaatae agtaageata
                                                                     1740
gttaaggggt gggtcagaac atgttaagat aacttactgt atatgtattc ccttqtattt.
                                                                     1800
tgttaaagct ggaacatttg atattttcc atttatttat gaaaaaatat gaacctattt
                                                                     1860
tcatttgtac aaggtaattg ttttttaaag caagtcacct taqqqtqqct ttaattqtat
                                                                     1920
aagtcaagca catgtaataa attcaaaacc tgcagttaac aggatattag acatcaatcc
                                                                     1980
tggtaaccaa atattaaaga ttctctttaa aaaagactga acatgtttac aggtttgaat
                                                                     2040
taggetaaaa ggtettgeag tggettttea tggeeettea aattggaatg gaactactgt
                                                                     2100
actttgccat ttttctataa atcagtattt ttttttaatt ttgatataca ttgtgtgaaa
                                                                     2160
aaagaaaatg gctaataaac tgtattaaat cttaaacaat gtataaagat tgtacttagc
                                                                     2220
cagttcaaag tgtatattta ttcataatga attataacag ttatattttt gtgttttctt
                                                                     2280
gtaaatgttt cttttccctt aaatacagat aattcatttg tattgcttat tttattatga
                                                                     2340
gctacaacaa aaggacttca ggaacaagta atgtattagt atggttcaag attgttgata
                                                                     2400
ggaactgtct caaaaggatg gtggttattt taaatataaa tagctaatgg gggtggtagg
                                                                     2460
cctataaaat taaatgcctt gtataaaatc caaaatgaat gcaaaattgt tttcacttgt
                                                                     2520
attgacttta tgttgtatga ttccaatctc tgttctgttt ggcacttgta tttaattctt
                                                                     2580
cacctttgta agacatttgt atattgtgca tgtgttcatt caagctattt aatatctggc
                                                                     2640
actgttaata cacagtactt tattgt
                                                                     2666
```

```
<210> 3360
<211> 7502
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(6861)
<223> similar to gi3413886 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

3360

tggtggttga aaacattacc ctcatgtgcc tgaggatctt gcagaagctg ataaaaccac

```
ctgctcccac tagcaagaag aacaaggatg tccccgttga ggccctcacc acggtgaagc
                                                                     3420
catactgcaa tgagatccat gcccaggctc aactgtggct caagagagac cccaaggcat
                                                                     3480
cctatgatgc ctggaagaag tgtcttccta tcagagggat agatggcaat gggaaagcc
                                                                     3540
ccagcaaatc agagctccgc catctctatt tgactgagaa gtatgtgtgg aggtggaaac
                                                                     3600
agttcctgag tcgtcggggg aagaggacct cccccttgga tctcaaactg gggcataaca
                                                                     3660
actggctgcg acaagtgctt ttcactccag caacgcaggc cgcacggcag gcagcctgta
                                                                     3720
ccattgtgga agetetagee accattecea geegeaagea geaggteetg gaeetgetta
                                                                     3780
ccagttacct ggatgagetg agcatagetg gggagtgtgc agetgagtac etggetetet
                                                                     3840
accagaaget cateacttet gegeactgga aagtetaett ggeagetegg ggagteetae
                                                                     3900
cctatgtggg caacctcatc accaaggaaa tagctcgtct gctggccctg gaggaggcta
                                                                     3960
ccctgagtac cgatctgcag cagggttatg cccttaaaag tctcacaggc cttctctct
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cctttgttga ggtggaatcc atcaaaagac attttaaaag tcgcttggtg ggtactgtgc
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tgaatggata cetgtgettg eggaagetgg tggtgeagag gaceaagetg ategatgaga
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cgcaggacat gctgctggag atgctggagg acatgaccac aggtacagaa tcagaaacca
                                                                     4200
aggeetteat ggetgtgtge attgagaeag ceaagegeta caatetggat gaetaeegga
                                                                     4260
ecceggigt cateficgag aggefetgea geafcattia teetgaggag aatgaagtea
                                                                     4320
ctgagttett tgtgaccetg gagaaggate eccaacaaga agaettetta cagggeagga
                                                                     4380
tgcctgggaa cccgtatagc agcaatgagc caggcatcgg gccgctgatg agggatataa 🔻
                                                                     4440
agaacaagat ttgccaggac tgtgacttag tggccctcct ggaagatgac agtggcatgg
                                                                     4500
agettetagt gaacaataaa atcattagtt tggacettee tgtggetgaa gtttacaaga
                                                                     4560
aagtetggtg taccacgaat gagggagage ceatgaggat tgtttategt atgeggggge
                                                                     4620
tgctgggcga tgccacagag gagttcattg agtccctgga ctctactaca gatgaagaag
                                                                     4680
aagatgaaga agaagtgtat aaaatggctg gtgtgatggc ccagtgtggg ggcctggaat
                                                                     4740
gcatgcttaa cagactcgca gggatcagag atttcaagca gggacgccac cttctaacag
                                                                     4800
tgctactgaa attgttcagt tactgcgtga aggtgaaagt caaccggcag caactggtca
                                                                     4860
aactggaaat gaacaccttg aacgtcatgc tggggaccct aaacctggcc cttqtaqctq
                                                                     4920
aacaagaaag caaggacagt gggggtgcag ctgtggctga gcaggtgctt aqcatcatqq
                                                                     4980
agatttatac aagctgagcc caatgttgag cccctgagtg aggacaaggg caacctcctc
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ctgacaggtg acaaggatca actggtgatg ctcttggacc agatcaacag cacctttgtt
                                                                     5100
cgctccaacc ccagtgtgct ccagggcctg cttcgcatca tcccgtacct ttcctttgga
                                                                     5160
gaggtggaga aaatgcagat cttggtggag cgattcaaac catactgcaa ctttgataaa
                                                                     5220
tatgatgaag atcacagtgg tgatgataaa gtcttcctgg gactgcttct gtaaaatagc
                                                                     5280
tgctggcatc aaggaacaac agcaatgggc accagctgga aggatcttga ttctccagaa
                                                                     5340
ggggatcacc cagaatgcac ttgacctaca tgaaaaagca catccctagg cggccaggat
                                                                     5400
ttgggatgcc gacatcttgg aaaagttttt gtcttcgccc agccttgcca tttatcctaa
                                                                     5460
ggctgcttcg gggcctggcc atccagcacc ctggcaccca ggttctgatt ggaactgatt
                                                                     5520
ccatcccgaa cctgcataag ctggagcagg tgtcccagtg atgagggcat tgggaccttg
                                                                     5580
gcaagagaac ctggctggaa agcctgcggg aacaccctga cgtaaacaag aagattgacg
                                                                     5640
ccagcccgca gggagacccg ggcagagaag aaacgcatgg ccatggcaat gaggcagaag
                                                                     5700
gccctgggca ccctgggcat tgacgacaaa tgaaaagggc caggtcgttg accaaggaca
                                                                     5760
gcactccttg aagcagattg ggaagagctg atcgaggagc cttggcctca cgtgctgcat
                                                                     5820
ctgcagggag ggatacaagt tccagcccac aaaggtcctg ggcatttata ccttcacgaa
                                                                     5880
gcgggtagtc cttggaggag tttgggagaa taagccccgg gaaaccagca gggctaccag
                                                                     5940
caccytytee caetteaaca ttytycaeta cyaetyceca tetyyettye cyteayttty
                                                                     6000
gctcgaggcc gggaagagtg ggagagtgcc gccctgcaga atgccaacac caagtgcaac
                                                                     6060
gggctccttc cggtctgggg acctcatgtc cctgaatcag cttttgccac ttgcttggca
                                                                     6120
agacacaaca ettaceteca ggaatgtaca ggecageggg ageceaegta teageteaac
                                                                     6180
atccacgaca tcaaactgct cttcctgcgc ttcgccatgg agcagtcgtt cagcgcagac
                                                                     6240
actggcgggg gcggccggga gagcaacatc cacctgatcc cgtacatcat tcacactggg
                                                                     6300
ctttacgtcc tgaacacaac ccgagcaact tcccgagaag agaagaacct ccaaggcttt
                                                                     6360
ctggaacagc ccaaggagaa gtgggtggag agtgcctttg aagtggacgg gccctactat
                                                                     6420
ttcacagtct tggcccttca catcctgccc cctgagcagt ggagagccac acgtgtggaa
                                                                     6480
atcttgcgga ggctgttggt gacctcgcag gctcgggcag tggctccagg tggagccacc
                                                                     6540
aggetgaeag ataaggeagt gaaggaetat teegettaee gttetteeet tetettttgg
                                                                     6600
geoctegicg atotoattta caacatgitt aagaaggige ctaccagtaa cacagaggga
                                                                     6660
ggctggtcct gctctctcgc tgagtacatc cgccacaacg acatgcccat ctacgaagct
                                                                     6720
gccgacaaag ccctgaaaac cttccaggag gagttcatgc cagtggagac cttctcagag
                                                                     6780
```

```
ttcctcgatg tggccggtct tttatcagaa atcaccgatc cagagagctt cctgaaggac
                                                                     6840
ctgttgaact cagtcccctg accaccaca agcagctgcg gcggcgaaga cgaagctggc
                                                                     6900
ttgccttcca ccctctgttc tccctccttg tgcattaagt tccctccgcg ggatgctgca
                                                                     6960
ttgttacccc gccctcccct ctctcatttt tcttggtgtg gcttggggtt tttaggcttc
                                                                     7020
ctgttttatc tcgtgtgtgt ggtgcaccag ctatgaggtt gtctgtaacc caagccatca
                                                                     7080
aagggeetgt acatacetag gageeatgag ttgteeegge cagetteata ettgagtgtg
                                                                     7140
cacatcttga gaaataaaca agtgacttaa cacacattga aaaggaaggt gttgcctgct
                                                                     7200
getteaacte gteeteagtg gegeaggeea aatggtttee ettgaatgea cageeattte
                                                                     7260
cggcgtcagc ccgggaagac tcatgtcaga cccgctgtct ccaggcctgt tgtcagcgct
                                                                     7320
aagtgcaacc tgtctattct tggccagcaa gttggggcac cacattggat ggctctgatt
                                                                     7380
tttcccaaaa caaagcccat gccttgctct taattttttg gccttaagag ctggaaccca
                                                                     7440
aagacacgtg gagcccagag ctttcctagc cctcggctga aggaaggctc gcggagtagg
                                                                     7500
                                                                     7502
```

```
<210> 3361
<211> 187
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (180)
<223> similar to gi344422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3361
atgggaaacc tcaagggcac ctttgccaca ctgagtgagc tgcactgtga caagctgcac 60
gtggatcctg gtctgtgtgc tggcccatca ctttggcaaa gaattcaccc caacagtgca 120
ggctgcctat cagaaagtgg tggctggagt ggctaatgcc ctggcccaca agtatcacta 180
agctcgc 187
```

```
<210> 3362
<211> 3307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2408)

<223> similar to gil230564 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cttcctctcc acgcggttga gaagaccggt cggcctgggc aacctgcgct gaagatgccg
                                                                       60
ggaaaactcc gtagtgacgc tggtttggaa tcagacaccg caatgaaaaa aggggagaca
                                                                      120
ctgcgaaagc aaaccgagga gaaagagaaa aaagagaagc caaaatctga taagactgaa
                                                                      180
gagatagcag aagaggaaga aactgttttc cccaaagcta aacaagttaa aaagaaagca
                                                                      240
gagcettetg aagttgacat gaatteteet aaatecaaaa aggcaaaaaa agaaagagga
                                                                      300
gccatctcaa aatgacattt ctcctaaaac caaaagtttg agaaagaaaa aggagcccat
                                                                      360
tgaaaagaaa gtggtttett etaaaaceaa aaaagtgaea aaaaatgagg ageettetga
                                                                      420
ggaagaaata gatgctccta agcccaagaa gatgaagaaa gaaaaggaaa tgaatggaga
                                                                      480
aactagagag aaaagcccca aactgaagaa tggatttcct catcctgaac cggactgtaa
                                                                      540
ccccagtgaa gctgccagtg aagaaagtaa cagtgagata gagcaggaaa tacctgtgga
                                                                      600
acaaaaagaa gggcgctttc tctaattttc ccatatctga agaaactatt aaacttctca
                                                                      660
aaggccgagg agtgaccttc ctatttccta tacaagcaaa gacattccat catgtttaca
                                                                      720
gcgggaagga cttaattgca caggcacgga caggaactgg gaagacattc tcctttgcca
                                                                      780
tccctttgat tgagaaactt catgggggaa ctgcaagaca ggaagagag ccgtgccct
                                                                      840
caggtactgg ttcttgcacc tacaagagag ttggcaaatc aagtaagcaa agacttcagt
                                                                      900
gacatcacaa aaaagctgtc agtggcttgt ttttatggcg gaactcccta tggaggtcaa
                                                                      960
tttgaacgca tgaggaatgg gattgatatc ctggttggaa caccaggtcg tatcaaagac
                                                                     1020
cacatacaga atggcaaact agateteace aaacttaace atgttgteet ggatgaagtg
                                                                     1080
gaccagatgt tggatatggg atttgctgat caagtggaag agattttaag tgtggcatac
                                                                     1140
aagaaagatt ctgaagacaa tccccaaaca ttgcttttt ctgcaacttg ccctcattgg
                                                                     1200
gtatttaatg ttgccaagaa atacatgaaa tctacatatg aacaggtgga cctgattggt
                                                                     1260
aaaaagactc agaaaacggc aataactgtg gagcatctgg ctattaagtg ccactggact
                                                                     1320
cagagggcag cagttattgg ggatgtcatc cgagtatata gtggtcatca aggacgcact
                                                                     1380
atcatctttt gtgaaaccaa gaaagaagcc caggagctgt cccagaattc agctataaag
                                                                     1440
caggatgete agteettgea tggagacatt ceacagaage aaagggaaat caecetgaaa
                                                                     1500
ggttttagaa atggtagttt tggagttttg gtggcaacca atgttgctgc acgtgggtta
                                                                     1560
gacatecetg aggitgatit ggitatacaa agetetecae caaaggatgi agagteetae
                                                                     1620 ^
attcatcgat ccgggcggac aggcagagct ggaaggacgg gggtgtgcat ctgcttttat
                                                                     1680
cagcacaagg aagaatatca gttagtacaa gtggagcaaa aagcgggaat taagttcaaa
                                                                    .1740
cgaataggtg ttccttctgc aacagaaata ataaaagctt ccagcaaaga tgccatcagg
                                                                     1800
ettttggatt cegtgeetee caetgeeatt agteaettea aacaateage tgagaagetg
                                                                     1860
atagaggaga agggagetgt ggaagetetg geageageae tggeeeatat tteaggtgee
                                                                     1920
acgtccgtag accagcgctc cttgatcaac tcaaatgtgg gttttgtgac catgatcttg
                                                                     1980
cagtgeteaa ttgaaatgee aaatattagt tatgettgga aagaaettaa agageagetg
                                                                     2040
ggcgaggaga ttgattccaa agtgaaggga atggtttttc tcaaaggaaa gctgggtgtt.
                                                                     2100
tgctttgatg tacctaccgc atcagtaaca gaaatacagg agaaatggca tgattcacga
                                                                     2160
cgctggcagc tctctgtggc cacagagcaa ccagaactgg aaggaccacg ggaaggatat
                                                                     2220
ggaggcttca ggggacagcg ggaaggcagt cgaggcttca ggggacagcg ggacggaaac
                                                                     2280
agaagattca gaggacagcg ggaaggcagt agaggcccga gaggacagcg atcaggaggt
                                                                     2340
ggcaacaaaa gtaacagatc ccaaaacaaa ggccagaagc ggagtttcag taaagcattt
                                                                     2400
ggtcaataat tagaaataga agatttatat agcaaaaaga gaatgatgtt tggcaatata
                                                                     2460
gaactgaaca ttattttca tgcaaagtta aaagcacatt gtgcctcctt ttgaccactt
                                                                     2520
gccaagtccc tgtctctttc agacacagac aagcttcatt taaattattt catctgatca
                                                                     2580
ttatcattta taactttatt gttacttcat cagtttttcc ttttgaaagg tgtatgaatt
                                                                     2640
cattacattt ttattctaat gtattatctg tagattagaa gataaaatca agcatgtatc
                                                                     2700
tgcctatact ttgtgagttc acctgtcttt atactcaaaa gtgtccctta atagtgtcct
                                                                     2760
tecetgaaat aaataeetaa gggagtgtaa eagtetetgg aggaeeaett tgageetttg
                                                                     2820
gaagttaagg tttcctcagc cacctgccga acagtttctc atgtggtcct attatttgtc
                                                                     2880
tactgagact taatactgag caatgitttg aaacaagatt tcaaactaat ctgggttgta
                                                                     2940
atacagttta taccagtgta tgctctagac ttggaagatg tagtatgttt gatgtggatt
                                                                     3000
acctatactt atgttcgttt tgatacattt ttagcttctc attataaggt gattcatgct
                                                                     3060
ttagtgaatt cttcatagat agtatatata aaagtacatt ttaatagaaa gccagggttt
                                                                     3120
taaggaattt cacatgtata aggtggctcc atagctttat ttgtaagtag gctggataaa
                                                                     3180
tggtgcttaa atggtaatgt actccacttc ttcctattgg aagattaaca ttatttacca
                                                                     3240
agaaggactt aagggagtaa ggggcgcaga ttagcattgc tcaagagtat gtaaaaaaa
                                                                     3300
aaaaccc
                                                                     3307
```

```
<210> 3363
<211> 4461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4464)...(2165)

<223> similar to gi3724141 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3363
ttttttttt ttaagattta atgetttatt getettgatg geaaateaaa atatgettta
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gaaataaagt taatttactg gaaaatagga gtttttgcac caaaccataa aattgcattt
                                                                      120
cattacatca agagaacccc ctcattgtct acaatcatgc ccgcttcctt tcccctcagc
                                                                      180
gcccgggaca cgtgaccgag atcataccct aaattcctga tccttttgca gttgccacat
                                                                      240
actgtggctt ttagtacatc ataaaaaagt gcttgtcctg tggcctcagc tgggaggccc
                                                                      .300
tggcgctggg gctaaggggc ccaaggcacc atcccaaagg ctgggaggaa agaacccaaa
                                                                      360
cccaggeeet eeteetgeee tecageettt gacaggeaac teatttggea tgatetgttt
                                                                      420
tggtgtgttt aaaacataca tttgcatgtg tctagtgtaa agcaacaagt ttgaggaaat
                                                                      480
aagtggaagg agagaggaag ttccagttag atggttccac tagtgtctac tggtaattgg
                                                                      540
caaaactatg agtgttgcta acctgggctg agggcacctc tgcctgtgca ggcagctgac
                                                                      600
caggettgga gaatgagaaa gggtteecaa ggacaggatg ecagegggat tetttgttge
                                                                      660
aaactgcaca cagtgcaatt tttgggaagc agggatgggg agtgggcatg agaccgggtt
                                                                      720
gttgggacca ctctggggtc aggccctggg tgaggcacag gaggctgcac acaggcactt
                                                                      780
ggtgggttct gccgggtcag ggtgggaàgg caggagaagt gtctgtggca ggacgggaag
                                                                      840
aagetteagt acatecetet ettgeacete tgeecactee acetgaggeg tgggeteect
                                                                      900
cocceteate eteteaceae atgeetgagg egtaggetee ceteateete teacegeatg
                                                                      960
gggcattige teccageete taetteeete aaggeettet cageagetgg ggeteagtgg
                                                                     1020
ggaaggtggt ctcagaaggc ccctgaagca tacgtgcttt tgctgggcag aaactggcaa
                                                                     1080
gctggcagtg ctccctggca ccagtttcac gggcgcaggc cccaaggggc cgtgtagagg
                                                                     1140
gcggggtggg catectggee tggeetgeag tgeeaggaee eeacgetgtg etgetgeeee
                                                                     1200
getteetget teeegteate cegtgtettg acceegeeet tgetgtttet etgagtagga
                                                                     1260
aacgcagcgg gaggtggtcc agagggaaag cggccgaccc tgagggctgc cctcaccctg
                                                                     1320
gcagctcccc gttctcatta gggttcctga cccaagtgtg gtgacagcag gtatctgatt
                                                                     1380
agcaaccctg caaacggtga aagtatctat aagaggacca cagccacagg ctgcgagtta
                                                                     1440
agtaagatga teettggage atgecacact gteeteteea gageggtggt cagaggeeet
                                                                     1500
ggtgggggcc ttggtggcaa agggagtctc ccaggggaga acctgggaag gatggactca
                                                                     1560
ctctgctgga tgggctgttc cgctcctgcc actggctcct ggctgagggg ctggcctgt
                                                                     1620
gggtgactct gctcacccag tggctttggc tggcggctgg gagttgggtt ggggtgggtc
                                                                     1680
cgccgaactc tgagcagagc ctccctgagc tgggtcccca gggctggctc accttgggca
                                                                     1740
agagaggtgg ctatggggct cccgcagagt ggggtcctgc atccccaccc cttccctctg
                                                                     1800
cagggtcage ageagggagg acacetgtee aggtgetetg aettgaeetg gecaegggge
                                                                     1860
atccgcacca actaaaggca ccatccagtt gcctctgggg tgagattggt ctggacgtca
                                                                     1920
gcccaggggt ctgggcgggg caccagggtc tttggcttat tgaacaggga ccgtggacag
                                                                     1980
taaggacaga ggaagatgat accaaaggca gaaaaccagg aaggaaatct tacaggggcg
                                                                     2040
gggctcctct gggaggggcc ctcgcagcag gtttctagcg ggcatgggtt gggaggcagc
                                                                     2100
agetggaetg ggaeceagga eteggagtgt ggeegggete egggeeagge eteegegggg
                                                                     2160
cgtcagttcc cgggcacgct gaggatgaag cccgagcgat tcttggtgaa gtcgggctgg
                                                                     2220
ggctggttga gccgcgtctc cacggagacg gtgcacttct tcccgtgcag gctgcactgt
                                                                     2280
```

```
actgggttgg tgacgttcca cttgaaggtg gcgcttctca ctcttgaaat gattcaccag
                                                                     2340
cacteccaac aagtteteca attegaetet catgggttgg etgtttgetg aagaggeaga
                                                                     2400
caatgaggtc tttgttgtct ttcgtatgga acactacaag ttggtccttt ccattggaga
                                                                     2460
cactcagacc agtcaaattg tatagaggga tagtcttcat caccttgtac tgtttagtgg
                                                                     2520
gatccatttt atacaggtga cggtcagtga caaaaattgc tctgtcttcc accttactaa
                                                                     2580
atcgatttac cttacggacg tgacaggaaa agaggacatt catgtatttg tccttccgtt
                                                                     2640
tcaattcatt agcaacaggg acaaaagtgc ctgaggtctg aggtgtatct ggctttgaag
                                                                     2700
caagatagtt gccctcccag gccctctgga gcccgaggtc agccctttga cccttcaaca
                                                                     2760
tttccacggc tgcaaccttt gccctgacct ggggcaggtc tgaggccgga atgctcttga
                                                                     2820
tgagctggga tgctctccat ctattgaaaa tcgtctgcag ggcctcctca aaacggcgaa
                                                                     2880
gaactttagg agggettgge caetteaegt getteeegta gtetegeatg gtettgaege
                                                                     2940
catggaageg tetggecace tegtggatgt acgaetteae tttgtagege eggtagtace
                                                                     3000
tgattattgt cagagetgee ttggttettt tgtacegeat gegggeeagg gtgeeeegee
                                                                     3060
acaccttttg tagaaagagg acaatcctta tgagcatctg ggcacggagt tcttccaagg
                                                                     3120
taaacaatgt tcggggtgtt cgaatgaaaa ttttggtctt cccataagct acatcatcct
                                                                     3180
gaaaaccaca ccgttcaatt agtttcttga cagcctcttt gtctgaagga aggtcatggt
                                                                     3240
tgggccaggt gaattcagag atcatcttat acctgtgaag aaacttctcg tatgtctggc
                                                                     3300
ggaaggcaaa teetgeeega egeactetea catttteeag tagteeaaga tattetaett
                                                                     3360
ggtgccggca gcgttcatca tcaaatatct gtggagattt cttgtcattg ggtttgatgc
                                                                     3420
aacgaacgta atatggttcc tttgatgcaa ggttgtctac tagagcaatc atagaattct
                                                                     3480
taaacaaggt agcagcagtc agaggtcgct tggtcacctc tgtaatgctc agtttgcctt
                                                                     3540
caggccacat attcttgagc acaggatttg aactgttata cataaggcgc ttgaaatctt
                                                                     3600
gaaataaagt atctttattt ttgtcaataa aaccaatgac agaatagact acatcgcctg
                                                                     3660
cataatgtcg aattcgaaaa tctcgatcaa actccagaat tttgtctgag gcacagagct
                                                                     3720
ttcggctgga aaaatgggcg tgtttgccca atttactgtt aagtgcttca agaaacattt
                                                                     3780
catcggtgac tttgccgaca ttcatgcaag catcatcaag gattgcaatg atccctttgt
                                                                     3840
gctgttgctc cacgaggtca acaatgatct gattgttgaa gtagtcaata tgtttccagg
                                                                     3900
ggatcccttc ccgctggtat tcctcttgtt cttgcttcag aaccagctga ataaatagct
                                                                     3960
gctgcagttt ctcattgcag taattgatac agaattgttc aaaactgttg ttgtcaaaga
                                                                     4020
tttcaaagcc atagatatcc aagacaccaa taacagtgtt tttcccatgg attgtggtgt
                                                                     4080
catagttett gaceteaata atateattga tgcgagtaac gatecaacaa aaaaggeget
                                                                     4140
catatattgc cttggcaaag gcgtctctgc cgtagctggc ctcttgttct gtgtgctgct
                                                                     4200
tgtcaatgat gtcacggcct gtggccacag tccggtaaag aagggctttc tcaaccatat
                                                                     4260
ctgtcttagt agagagcaat tctgctatga tagatactac tttgccattc tcaataagag
                                                                     4320
gcgtgtcacc atctactaca aattttaaat ttcccaagtg cagaatagca gccaaaatct
                                                                     4380
tatacactgt ttggatctcc tcaggtttga agccaatgac tttcatggca tcagcaacaa
                                                                     4440
ctctgaattc ggcagcatca t
                                                                     4461
```

```
<210> 3364
<211> 6566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6567)...(1439)
<223> similar to gi4545099 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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tttttttttt ttgctataaa cattttattt attttttaag aaagtagctt cagaaaaaga
                                                                       60
ggaaaatatc tagatcattt atttatacat atatatattt tttaataaaa acctttacat
                                                                       120
tatcttcatg cataaagacc caggtgtggc catattgcct gagatagccc taacaccagc
                                                                       180
tatctcatgc cattacctgg ggctccctat agctgtcagc agtgtagcaa aggccctctg
                                                                       240
cctgcccta acgcccaact ccatgcctgc ctcagtcatg gtttgttttt gcttctggaa
                                                                       300
ggggtagatg gagggtggga aatgctttgg agctaacatg ggatgaacag ggagggttac
                                                                      360
ccaacctgcc attttttatc caaactctgc aggcaaatcc agacagagtc tcagcaagac
                                                                      420
tgaaaaccag ggaccaaacc aaactctggg agcttcccac agacatgtca catgtgacca
                                                                      480
agggttcctg cacatagtag tagcaaaggt atggtgttca tggaactcta aaggcaggaa
                                                                      540
caaaaacagc cctgaagatc aatccctccg tgacaggcat tcacttctgc cctaagtgtg
                                                                      600
tcagaaagat cccattttgt ttcctaactc aggccaaccc tcctttgcct ccaaaattca
                                                                      660
gtgttaacta accaattact taagagacgg atcectette ettetgtgga tagtteatet
                                                                      720
gttaaggatc cattatcacc tgtctcactc ctcctaagga gtcctagtat aaaagggcca
                                                                      780
gggtaggagt agggaagctg gttggcatgg agggtcacaa gatccagaat ggctagggat
                                                                      840
ggaaaaagaa taccctggtt ctttggggga ttctgccaaa ggagctttat tgaccatttt
                                                                      900
tttaaaggaa aaacactgaa tgatcttgag gatggtaaac tgtctcctct tctgggttcc
                                                                      960
agaagccctt atgctacgtt cagtattaag aaaagccctg aacaagtgga ggatgctgct
                                                                     1020
tctggcagca gggagggagg gtagatgcca cagccaaccc agagaatggc aaacagtgcc
                                                                     1080
aatccaaaca aggcagggaa cctctgtgtg gtgtgaatgg gcatgtgact gtgatgcaaa
                                                                     1140
gtgcctgggg ctcacaggct cccaacagcc agttctcgca gataggactg ggtaaggctg
                                                                     1200
cgcagttcgt ccatggcata gtcctcaggc atgggaagcc ggccaatgtg gggagccaag
                                                                     1260
aggcgcaaag ggactcgctg agggtctggt gttgagtcgg aggttctatc aggaggatga
                                                                     1320
tgcagactca gcaccacgcg cagcaggttg gctacacgtt tggccatgtc tgactgagcc
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tetttagece aagatteagg ggteteeaac agetggeagt geegggtaag eagetetega
                                                                     1860
acagcettet caegtatgee tgagttgtea atgtgeagga ggaeaaagat ggeeeactee
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cagagecect caettteaag etggeeageg taaetggeet gtageacace tteaeactge
                                                                     1980
gctgagagat gggtgtagtt aagagccctc agcacttccc acaagtgcca gcttaggcgg
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cggaacctca ggggctgggc tgggcattgt gaacacagaa gtcaggggtg gagggacaga
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```

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cacagagaca cttgggtgaa agaaaagctc ccacttgtaa attttgattg tagtaaccca
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                                                                     3660
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                                                                     4080
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ttatcatcta agtagacaac tacttctttc ctccggatat gcacaatatc atccaaattt
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                                                                     4620
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                                                                     4680
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                                                                     4740
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cctgaattag tggtggagga gctgaagagt cctgttgcgc tggaagtggc tggagaagac
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                                                                     6060
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aagccagtat tetgteeaaa tgttgaagtt gtgeeaaage caeetgtgee acccccaaag
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ggtgttccaa atgatttgtt aaacat
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```

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<210> 3365
<211> 6556
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6558)...(1397)
<223> similar to gi2564332 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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                                                                 120
agatgcacta acceptitet taaggccata acaagattit titggactit tittittit
                                                                 180
taaaactcag atatttaaaa attatacaat ttacaaaaca aaacaacaca acataaagaa
                                                                  240
tcacgtagca tggggctgcc tatctgacag gtcctctttt cctttataaa aatgaaagca
                                                                 300
aaaagaaaaa ggggttaaat gggtgttcct ggtcagctta acccactctg atcacagcga
                                                                 360
cagtecetee eegteeetge etacagetea caetgeeage tetggeaaca caggeetgga
                                                                 420
cctcctccca tccccacggg tccctgtggg tcagggcaca gctgcctgga atgtgctgag
                                                                 480
gacagggggc cccagaggag ggtcatccct tgattttgct gctgctgtgt acacttgatg
                                                                 540
gggtccttga ggtcctcacc agccccagtg acccaggaca cagctatgac ctcaggcatc
                                                                 600
660
totggaaatg aaaaaaatt tatttttgtg tttaaacatc attcccctac tottgaaaac
                                                                 720
atggaccate cetgtattte eccetecece aaaacettee caetttgaga caaattaatq
                                                                 780
acaaaaggat ggttctgctg tggtttgctt tttcaatcct gggtctagtg ttttctgaac
                                                                 840
tggtgtgaga caggctaaag atcaacgcca cacacacac ccgtccttca tgagatgagg
                                                                 900
gtttgttcag ttcaatctca catttaaatt tcacttgtca tcggaacaaa tttggagatc
                                                                 960
tttaacgaga taattttaaa acagaatcaa aagggatagc gcacctttca tttaaacaaa
                                                                1020
gtctttccag actaaaaata gatttatata tatatattta tccctccctt ttaattcccc
                                                                1080
ccaccettte eccateatee caccettee eccteecee acattgteae tatggagatt
                                                                1140
gtgtccatgg aaacagccat tccaacgtct tgggtctttc tttcctgtgg tgtcactggt
                                                                1200
1260
1320
caccaccttc tcatctccac agtctcacct gtgcttgctg tcctttccat tcccacgagc
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acactgocco cotcaccocc gotcogactg ctctgtgctg aggotgcctt tcgcggtctt
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gttctgcaag ggggggagag ggcacggaag gggaggcttg tgcttagggc acctcaccga
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gaagttetee teatgtagea aacaatetge ateaatggea caegggtaat ggtateggaa
                                                                1560
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catchetetg getattteca gegetteetg caggecatag ageetgeeac aaaccaggta
                                                                1680
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cctggggtgt gcgggccagg cttctctgct ccttctggct gctggctgct gctcttcctc
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                                                                2040
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                                                                2100
gggataaaaa ggtccaaaga ggtcacccat gttccggtaa ctggcccact tgccacacag
                                                                2160
acagcaaacc aggtgcccca taaccgaaga ctctgtcaca acaggtccct gcagcataaa
                                                                2220
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                                                                2280 ·
gaccettect geoceteact aattiggiet gitettette etcageatig atgatigtae
                                                                2340
aaacggctcc aagttcacac ttatttacta catggatgta agggtaaaaa gacttgttct
                                                                2400
tggcatcagt tttatccaag tggctgggtg gcatatttta atttgatctc aggttcttgg
                                                                2460
```

```
ggttcccaca atgggaactg cttgtttggt ttttcgcttc ctcggctggg ccccaggctt
                                                                    2520
cettetetee etecttigee tetgtttttt tggettigge tetecatetg cagaacette
                                                                    2580
tggtatetgt gggggetgag ggggtggagg eggtggetge tgetgtttet tttgettatt
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cacactacca atgggtctcc ccttcttctt tcctgatggg aaatatccct ttggagggaa
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accetettge tteggtgaaa tegteaetgt ategttetee ttetetteag cettggggtt
                                                                    2760
tgcctcaggg gccaatatgc ccactggagg tacattcttt gagtctggaa agattaaagg
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tgctgttcca cccagggaac catctggtct cccttggtta ctaccaggct tctgtgaggt
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tgtggatgte atggeaceag ggggtteett teeggeagta actgtttetg catgtgtete
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ctctacgtgc aactcctggt ttgctggact gactaggtcc gaagccacct caccttttct
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```

```
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tgaagggaag gaggag
                                                                    6556
```

```
<210> 3366
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8) ... (726)
<223> similar to gi4755083 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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ggtttgtgaa atggctgctg acatttctga atccagcggg gctgactqca aaggagaccc
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ttcattacca acagagtact gtgaatatat gcctgatgtt gctaaatgta gacaatggtt
                                                                      300
agagaagaat tttccaaatg aatttgcaaa acttactgta gaaaattcac ccaaacaaga
                                                                      360
agctggaatt agtgagggtc aaggaacagc aggggaagaa gaggagaaga aaaaacagaa
                                                                      420
gagaggtgga aggggtcaaa taaaacaaaa aaagaagacc gtaccacaaa aggttactat
                                                                      480
agccaaaatt cccagagcaa agaagaaata tgtgacaaga gtatgtggcc ttgcaacttt
                                                                      540
tgaaattgat cttaaagaag cacaaagatt ttttgctcaa aaattctcct gtggtgcctc
                                                                      600
agtaacaggg gaggatgaaa ttatcattca gggagatttt acagatgaca taattgatgt
                                                                      660
cattcaggaa aaatggccag aggtagatga tgacagcatc gaagatcttg gagaagtaaa
                                                                      720
gaagtgaatt tgaaaatttg totgtattta atggootgaa otgagagttg atatggooaa
                                                                      780
agggagagag gccttttaaa atatatatat atatacacat atatatgtat atatacacat
                                                                      840
atatgtatgt atacacatat acacatgtat atatacatgt gtgtatgtat acatgtatat
                                                                      900
acatatatac atacacatat atgtatacat atatacacat atatgtatac atatatacac
                                                                      960
atatatgtat acatatatat atattetaca gtaaaaetgt agggetgtee tegteettgg
                                                                     1020
cattttcact gttctgtaca aggctgcttg tttttttatt gccaaagtca aataaacggg
                                                                     1080
agactgtcat gctcatgcat gaatagaatt tagtcaaata
                                                                     1120
```

```
<211> 326
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (8)...(297)
<223> similar to gill43061 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3367 Cgcggacgcg tcgacctcta aacagcttag agccacagtt ctcaaacggc ctgcctgtct 60 ccaagcattg gcagcagctg ctgtcctcac cttaaaagcc taaaaccatc tctacatgcc 120 aacctaacag tttattcaac ccataacatc aaaaacatgc taactcacca cagtgtacta 180 agtttcatct ccccctcaca gcttctccaa ctgtatgctc tattcataaa aactccccaa 240 atcaccgtgc taaccagctc tcgtctaaac ccagccatgc tcttacctga aatttctacc tgacaaagacc ctgcacactt ctgtgt

```
<210> 3368
<211> 399
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (135)...(388)
<223> similar to gil840393 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3368
ggcacgaggc ataaagtctg attctcttac tgtctgcatg gagttttttc acttctgtgt 60
ggccttggaa actgtgtcat ccttatattt gggttctggg atattgctgg tgataatctt 120
ggtgctgcat atcggtgact ccagcccatc tcaatgacct tgcttgtatt attccattac 180
ttggacatgg cctcctgtat tccctgagag gtcccgaccc ctttacagac atcctgcact 240
tcagactatt tgtcggagca cggatctacc actccattgc atatttgaca cccctttccc 300
agccaaatag agctttgaga ttttttgttg gatatggagt tacctctttc catggcttac aggttgctta aaagtatatt ggacctgtaa agaaaatcg
```

```
<210> 3369
<211> 631
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (522)...(214)
<223> similar to gi4929553 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3369 ttttttttta cagatatcca atttttaat ttaattaaaa ctttacaatt gtatttacat 60 aatccatgga aggagagaaa ggggatgaaa cttgaaggaa ccaggactct qqaqqatqca 120 ggatgctgtt tctctggatg agatgtactc tgccactgtg ctctctqqqc actttcaqat 180 gatggggtct gagatgtctc ctcaggctgc atcagctgtc ttcagtctcc agaacagaaa 240 gagcctgacc caggggcatc ttgggtggcc accagaacca ggtttctggg agagagttca 300 ggactgaaga tggggcagga gctcagcatg gaaaccctgt tcctgaaggt acagcagccg 360 gtccagtaga ataagcgtct ccaccagtgg ggcaagcagt agagccaggc tgaagaaggc 420 caccacacgg ttctcctggg ccacgtgggc ctgaagggca gccagattca gtggcagctg 480 gggatctage eccaeteget gtagececeg etgeacatat etgtgggate agteacatte 540 agcactcagt ttggttttaa gaactgtcac ctctcactta aactttgctt gttcctaatt 600 cagttccaác tttgctttat tttctcgtgc c 631

<210> 3370
<211> 405
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (361)...(104)
<223> similar to gi4929731 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<210> 3371
<211> 4357
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (3)...(3068)
<223> similar to gi4034486 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
aggaaggaag caaagggaca aaaccacctc cagcagtttc tacaaccaaa attccaccta
                                                                       60
taacaaatat ttttcccctg ccagagagat tctgtgaagc attagactcc aaggggataa
                                                                      120
agtggcctca gacacaaagg ggaatgatgg ttgaacgacc atqccctaaq qqaacaaqaq
                                                                      180
gaactgcctc atatctctgc atgatttcca ctggaacatg gaaccctaag ggccccgatc
                                                                      240
ttagcaactg tacctcacac tgggtgaatc agctggctca gaagatcaga agcggagaaa
                                                                      300
atgetgetag tettgecaat gaactggeta aacataccaa agggecagtg tttgetgggg
                                                                      360
atgtaagttc ttcagtgaga ttgatggagc agttggtgga catccttgat gcacagctgc
                                                                      420
aggaactgaa acctagtgaa aaagattcag ctggacggag ttataacaag ctccaaaaac
                                                                      480
gagagaagac atgcagggct taccttaagg caattgttga cacagtggac aaccttctga
                                                                      540
gacctgaage tttggaatea tggaaacata tgaattette tgaacaagea catactgcaa
                                                                      600
caatgttact cgatacattg gaagaaggag cttttgtcct agctgacaat cttttagaac
                                                                      660
caacaagggt ctcaatgccc acagaaaata ttgtcctgga agttgccgta ctcagtacag
                                                                      720
aaggacagat ccaagacttt aaattteete tgggeateaa aggageagge ageteaatee
                                                                      780
aactgtccgc aaataccgtc aaacagaaca gcaggaatgg gcttgcaaag ttggtgttca
                                                                      840
tcatttaccg gagcctggga cagttcctta gtacagaaaa tgcaaccatt aaactgggtg
                                                                      900
ctgattttat tggtcgtaat agcaccattg cagtgaactc tcacgtcatt tcagtttcaa
                                                                      960
tcaataaaga gtccagccga gtatacctga ctgatcctgt gctttttacc ctgccacaca
                                                                     1020
ttgatcctga caattatttc aatgcaaact geteettetg gaactactca gagagaacta
                                                                     1080
tgatgggata ttggtctacc cagggctgca agctggttga cactaataaa actcgaacaa
                                                                     1140
cgtgtgcatg cagccaccta accaattttg caattctcat ggcccacagg gaaattgcat
                                                                     1200
ataaagatgg cgttcatgaa ttacttctta cagtcatcac ctgggtggga attgtcattt
                                                                     1260
cccttgtttg cctggctatc tgcatcttca ccttctgctt tttccgtggc ctacagagtg
                                                                     1320
accgaaatac tattcacaag aacctttgta tcaacctttt cattgctgaa tttattttcc
                                                                     1380
taataggcat tgataagaca aaatatgcga ttgcatgccc aatatttgca ggacttctac
                                                                     1440
actititett titggeaget titgetigga tgigeetaga aggigtgeag etetacetaa
                                                                     1500
tgttagttga agtttttgaa agtgaatatt caaggaaaaa atattactat gttgctggtt
                                                                     1560
acttgtttcc tgccacagtg gttggagttt cagctgctat tgactataag agctatggaa
                                                                     1620
cagaaaaagc ttgctggctt catgttgata actactttat atggagcttc attggacctg
                                                                     1680
ttaccttcat tattctgcta aatattatct tcttggtgat cacattgtgc aaaatggtga
                                                                     1740
agcattcaaa cactttgaaa ccagattcta gcaggttgga aaacattaag tcttgggtgc
                                                                     1800
tiggegetti egetettetg tgtettettg geeteacetg gteettiggg tigettitta
                                                                     1860
ttaatgagga gactattgtg atggcatatc tcttcactat atttaatgct ttccagggag
                                                                     1920
tgttcatttt catctttcac tgtgctctcc aaaagaaagt acgaaaagaa tatggcaagt
                                                                     1980
getteagaea eteataetge tgtggaggee teccaactga gagteeceac agtteagtga
                                                                     2040
aggcatcaac caccagaacc agtgctcgct attcctctgg cacacagagt cgtataagaa
                                                                     2100
gaatgtggaa tgatactgtg agaaaacaat cagaatcttc ttttatctca ggtgacatca
                                                                     2160
atagcacttc aacacttaat caaggaatga ctggcaatta cctactaaca aaccctcttc
                                                                     2220
ttcgacccca cggcactaac aacccctata acacattgct cgctgaaaca gttgtatgta
                                                                     2280
atgccccttc agctcctgta tttaactcac caggacattc actgaacaat gccagggata
                                                                     2340
caagtgccat ggatactcta ccgctaaatg gtaattttaa caacagctac tcgctgcaca
                                                                     2400
agggtgacta taatgacage gtgcaagttg tggactgtgg actaagtetg aatgatactg
                                                                     2460
cttttgagaa aatgatcatt tcagaattag tgcacaacaa cttacggggc agcagcaaga
                                                                     2520
ctcacaacct cgagctcacg ctaccagtca aacctgtgat tggaggtagc agcagtgaag
                                                                     2580
atgatgetat tgtggcagat getteatett taatgeacag egacaaceea gggetggage
                                                                     2640
tecateacaa agaactegag geaceactta tteeteageg gaeteactee ettetgtace
                                                                     2700
aaccccagaa gaaagtgaag tccgagggaa ctgacagcta tgtctcccaa ctgacagcag
                                                                   ...2760
```

```
aggetgaaga teacetacag teececaaca gagaetetet ttatacaage atgeecaate
                                                                   2820
ttaggagact ctccctatcc ggagagcagc cctgacatgg aagaagacct ctctcctcc
                                                                   2880
aggaggagtg agaatgagga catttactat aaaagcatgc caaatcttgq aqctqqccat
                                                                   2940
cagetteaga tgtgetacca gateageagg ggeaatagtg atggttatat aatccccatt
                                                                   3000
aacaaagaag ggtgtattcc agaaggagat gttagagaag gacaaatgca gctggttaca
                                                                   3060
agtetttaat catacageta aggaatteca agggecacat gegagtatta ataaataaaq
                                                                   3120
acaccattgg cctgacgcag ctccctcaaa ctctgcttga agagatgact cttgacctgt
                                                                   3180
ggttctctgg tgtaaaaaag atgactgaac cttgcagttc tgtgaatttt tataaaacat
                                                                   3240
3300
gatgccagcc aggtatttta agattctgct gctgtttaga gaaattgtga aacaagcaaa
                                                                  3360
acaaaacttt ccagccattt tactgcagca gtctgtgaac taaatttgta aatatggctg
                                                                  3420
caccattttt gtaggcctgc attgtattat atacaagacg taggctttaa aatcctqtqq
                                                                  3480
gacaaattta ctgtacctta ctattcctga caagacttgg aaaagcagga gagatattct
                                                                  3540
gcatcagttt gcagttcact gcaaatcttt tacattaagg caaagattga aaacatgctt
                                                                  3600
aaccactage aatcaageca caggeettat tteatatgtt teeteaactg tacaatgaac
                                                                  3660
tattctcatg aaaaatggct aaagaaatta tattttgttc tattgctagg gtaaaataaa
                                                                  3720
tacatttgtg tccaactgaa atataattgt cattaaaata attttaaaga gtgaagaaaa
                                                                  3780
tattgtgaaa agctcttggt tgcacatggt atgaaaagat ttttcttaca ctttgtcatg
                                                                  3840
gtaagttcta ctcattttca cttcttttcc actgtataca gtgttctgct ttgacaaagt
                                                                  3900
tagtetttat taettaeatt taaatttett attgeeaaaa gaacgtgttt tatggggaga
                                                                  3960
aacaaactct ttgaagccag ttatgtcatg ccttgcacaa aagtgatgaa atctagaaaa
                                                                  4020
gattgtgtgt cacccctgtt tattcttgaa cagagggcaa aagagggcac tgggcacttc
                                                                  4080
tcacaaactt tctagtgaac aaaaggtgcc tattcttttt ttaaaaaaaat aaaataaaac
                                                                  4140
ataaatatta ctcttccata ttccttctgc ctatatttag taattaattt attttatgat
                                                                  4200
aaagttctaa tgaaatgtaa attgtttcag caaaattctg cttttttttc atccctttgt.
                                                                  4260
gtaaacctgt taataatgag cccatcacta atatccagtg taaagtttaa cacggtttgc
                                                                  4320
cagtaaataa atgtgaattt tttcaagtaa aaaaaaa
                                                                  4357
```

```
<210> 3372
<211> 460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(354)
<223> similar to gi4689108 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3372
ggcacgaggg actatccacg cattgtgaac cacctggacc acacctatgt cactgcgccc
                                                                       60
caageettea tgatgtteea gtaetttgtg aaggtggtge ceaetgtgta catgaaggtg
                                                                      120
gacggagagg tactgacgac aaatcagatc tatgtgacca gacatgagaa ggctgcctat
                                                                      180
gtgctgatgg gcgaccaagg ccttcccgga gtcttcatcc tctatgagct ctcgcccatg
                                                                      240
atggtgaacc tgacggagat acacacgttc ttctctctct tcctgacaat tgtgggcgct
                                                                      300
caccataggt ggcatgttct ttgagcattt tgtcattaat tacttaaccc ataagtgggg
                                                                      360
gcttgggttc tatttcaaaa atgaaaactc tttacagggt ggccatagga ctttatatgg
                                                                      420
agtgaacttt tttatgtatt ggagtttacg ggggggctct
                                                                      460
```

```
<210> 3373
<211> 5255
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4581)
<223> similar to gil228035 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
cagaaaaatc accaaagtca cctaattcag tgaaagcaga aaaagcatcc agttatcaga
                                                                       60
tgaagtcaga aaaagtacca agttcaccag cagaagcaga aaagggaccc agtttactgt
                                                                      120
tgaaagacat gagacagaag acagaattac aacagattgg aaaaaaaatt ccaagctcct
                                                                      180
ttacttctgt ggacaaagtg aatattgaag ctgtaggggg agaaaaatgt gctctgcaaa
                                                                      240
actcaccacg atctcagaag caacagacat gtacagataa tactggtgat tctgatgata
                                                                      300
gtgcttcagg aattgaagac gtatcggacg atttaagtaa aatgaagaat gatgaatcta
                                                                      360
ataaagaaaa ttetteagag atggaetaet tagaaaatge eactgtgata gatgaatetg
                                                                      420
cattgacacc tgagcagagg ctggggttga aacaagcaga agaacgctta gaaagagatc
                                                                      480
acatettteg aettgaaaaa egateaceag aatataeeaa ttgteggtat etatgeaaae
                                                                      540
tttgcttaat tcacattgaa aatatccagg gggctcataa acatataaag gagaaacqac
                                                                      600
ataagaaaaa tattttggaa aaacaagaag aaagtgagct tcgttctctg ccacctcctt
                                                                      660
cccctgccca cttggctgct ttaagtgttg cagtcattga attagcaaaa gaacatggaa
                                                                      720
taacagatga tgacctcaga gtccgtcagg aaattgtgga ggaaatgtca aaggttataa
                                                                      780
cgacattttt accagaatgt tcacttaggt tgtatggctc atctctgact agatttgctc
                                                                      840
tgaaaagtag tgatgttaat atagatataa aatttcctcc caagatgaat catccagatc
                                                                      900
ttctgataaa agtacttggg attttaaaga aaaatgtatt atatgtagat gtggaatctg
                                                                      960
attiticacgo taaagiticot gitgiggigt goagagatog aaaaagitggi tiactitgia
                                                                     1020
gagtgagtgc aggaaacgat atggcatgtc tcactactga tttacttact gcccttggca
                                                                     1080
aaatagaacc tgtctttatt cccttggtgt tagcctttcg ctactgggct aagttgtgct
                                                                     1140
atattgactc ccaaactgat ggtggaatcc cttcttactg ttttgcttta atggtgatgt
                                                                     1200
tttttctaca acagagaaaa ccccctcttc ttccttgctt acttggaagt tggattgaag
                                                                     1260
getttgacce aaaaagaatg gatgacttte agetgaaggg catagtagaa gagaagtttg
                                                                     1320
tgaagtggga atgtaattca agtagtgcaa ctgagaaaaa ctcaattgct gaggaaaaca
                                                                     1380
aagctaaggc agaccaacca aaagatgata ccaagaagac agaaacagac aaccaaagta
                                                                     1440
atgccatgaa ggaaaaacat ggcaaatctc ctttagcatt ggaaacacca aatcgggtat
                                                                     1500
ccttgggaca gttatggtta gagctgctta aattctacac actggatttt gctttggagg
                                                                     1560
aatatgtcat atgtgtacgg atacaagata ttttaacaag agaaaataaa aactggccta
                                                                     1620
aaaggcgaat agccattgaa gatccatttt cagtcaagag gaatgttgca cggagcttaa
                                                                     1680
acagccagct ggtttacgaa tatgttgtgg agagatttag ggtagcttat cggtattttg
                                                                     1740
cetgicetca gacgaagggt ggaaataagt ciacagtgga titcaagaaa agagagaagg
                                                                     1800
ggaaaataag caataagaaa ccagtcaagt cgaacaatat ggcaaccaat ggttgtattc
                                                                     1860
tgcttgggga aaccacagaa aaaataaatg cagaaagaga gcaacctgtt caatgtgatg
                                                                     1920
aaatggactg tacatcacag agatgtatta ttgacaacaa caatttgttg gtaaatgaac
                                                                     1980
tagattttgc tgaccacgga caggactett catetette taccagcaaa agcagtgaaa
                                                                     2040
tagagecaaa attagataag aaacaagatg atttagegee tteagaaact tgtttaaaaa
                                                                     2100
aagageteag eeaatgtaat tgeattgatt tgtetaagte geetgaeeea gataaateta
                                                                     2160
ctggaacaga ctgcaggtca aatttagaaa cagagagttc acatcagagt gtgtgcaccg
                                                                     2220
acacatctgc tacctcttgc aactgcaaag ctacagaaga tgcttctgac cttaatgatg
                                                                     2280
atgataacct ccccacccag gaattatatt atgtgtttga taagtttatt ttaacctctg
```

		gttcaaaata					2400
		aagaatgatt					2460
		aaccgatttc					2520
		ccttgttctg					2580
		aaagaatatg					2640
		tttcgtgata					2700
		ttaaattgta					2760
		agaaacattt					2820
	acacaggcga	agtgggttag	aaggcgatat	cagtttatat	aatacgttgg	ctcaacataa	2880
	cacaagaatg	ctagctactt	atgcagctat	tgatcctaga	gtgcagtatt	tgggatatac	2940
		tttgctaagc					3000
		tatccttatg					3060
	cccagttcta	caagagatct	ttggatggga	aaacagattc	cacagagaat	ggttgatgga	3120
	tggaatgctt	tcttctttga	taaaacagaa	gaactgaaaa	agcgtttacc	ttcacttgga	3180
	aagaacacag	aatcattagg	ggagctttgg	ctgggactgc	ttcgtttcta	tactgaagag	3240
	tttgatttca	aggaatatgt	aattagcatt	cggcagaaaa	agctgttgac	aacttttgag	3300
	aagcagtgga	cttccaagtg	cattgcaatt	gaagaccctt	ttgacttgaa	tcataacctt	3360
	ggtgctggag	tttccagaaa	aatgaccaat	ttcatcatga	aagcatttat	caatggaagg	3420
	aaactttttg	gtaccccttt	ttatccactc	attggcagag	aagctgagta	cttctttgat	3480
	tccagagtat	taacagatgg	agaactggct	cccaatgata	gatgttgccg	tgtgtgtgga	3540
	aaaataggcc	actacatgaa	agactgccct	aaaaggaaaa	gcagtttact	gtttagacta	3600
	aagaagaaag	acagtgaaga	agagaaggaa	gggaatgaag	aagagaaaga	ttcccgagat	3660
	gttcttgadc	cccgagacct	ccacgatact	cgagacttta	gagacccgag	agacctcaga	3720
	tgttttatat	gtggagatgc	tggacatgta	cgaagggagt	gcccagaggt	caagctggcc	3780
	cgtcagagga	atagcagťgt	ggcagcagcc	cagctggtcc	gcaaccttgt	aaatgctcaa	3840
	caggtggctg	gttcagctca	gcaacagggt	gatcagtcca	taaggactag	acagtcatca	3900
	gaatgttctg	aatcaccatc	ttattctcct	cagcctcagc	catttccaca	gaactcttcc	3960
	cagtcagctg	ctattactca	gccttcatct	cagccaggat	cccaacctaa	gcttggccca	4020
	cctcagcagg	gagcccaacc	tccccatcag	gtccagatgc	cactgtataa	ctttccccag	4080
	tcaccaccag	ctcagtattc	tcccatgcac	aatatgggat	tgttgccaat	gcaccctctc	4140
	cagatccctg	ccccgtcctg	gcccatccat	ggcccagtga	tccactctgc	accaggcagt	4200
	gccccagca	atattggcct	aaatgatccc	agcatcatct	ttgcacagcc	tgctgccaga	4260
	cctgtggcaa	tccctaacac	gtctcacgat	ggacactggc	cccgtactgt	ggctccaaat	4320
	tccctggtaa	acagtggtgc	agtggggaat	tcagagccag	gctttcgagg	actgactcct	4380
	ccaattcctt	gggaacatgc	accgcgtccc	catttccccc	ttgtcccagc	ttcgtggcct	4440
	tatggtttgc	atcaaaactt	catgcatcag	ggaaatgccc	gattccagcc	caacaaacct	4500
	ttctatactc	aagacagatg	tgccacccgt	cggtgtagag	agcgttgtcc	ccacccacca	4560
	agaggaaacg	tgtcggagta	atgcgagtcc	attttctttc	agctggtcta	ccgatgcaca	4620
	gcaaccagcc	aatcctgctg	tctcaagggt	atccgtacct	caatgtcagt	tacattcagc	4680
	agaaaaagtg	acatttaatg	gaaagcaaaa	caaatcaggt	cctgatttaa	aattttaaca	4740
	cgtttagata	gcttatttaa	attctaagac	tgtttttaca	gactgtatta	tttgtatata	4800
	aatatgaact	atagttttta	ctagtatcac	caaattgagt	gataccaaat	ttcatctatt	4860
,	ttattacccc	taattttaag	ggaattttat	gttttgttta	aacccctgat	gaaatgtata	4920
	aagagagaaa	tttaaaaaaa	ttacattctt	tattttccta	ttagctgtat	tccatacctt	4980
	tggttgcttc	agactttata	tatattgttc	ttaagaatta	ggaaagaatt	tccatgtgtt	5040
	ttaaatttgt	cacttcctat	tctttacaga	accttgtagt	gccaaaaact	ttttaaaagg	5100
	taaaaaaata	aaataaaatt	acaacatgaa	gattcaaaaa	atttttttct	tttacatact	5160
	tgtatattga	atatattcaa	acttgaatgg	aaagttgctt	ttttgtctgt	atttgaagta	5220
	ccccatttt	aagttaataa	atctttttga	caaga			5255

<210> 3374

<211> 2440

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (344)...(1917)

<223> similar to gi5052652 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3374 ggtgcaggca ggtgcgatgg gccagcttga ggcacactga ggggacgcgg ggctgggcag . 60 tggcgtgcgc tcgggccgcc gccgccgctg cctcggcggg tcctcggcct cttcaggcaa 120 ccagccgcct caggagctgg ggcttgggga gctgctggag gagttctccc ggactcagta 180 ccgggccaag gatggcagcg ggaccggcgg ctctaaggtt gagcgcattg agaagagatg 240 tctggagctg tttggccgat actactgttt cagcgtgatt ccaaacacga atggggatat 300 ctgtggccac tatccccggc acatcgtgtt cctggagtat gagagttctg agaaggagaa 360 agacacgttt gagagtaccg tacaggtgag caagttgcaa gacctcatcc accgcagcaa 420 gatggcccgg tgcagaggac ggtttgtctg cccagtaatc ctgttcaagg gcaagcacat 480 ttgcaggtcg gccacactgg ctggatgggg agagctgtat ggacgctcag gctacaacta 540 ttttttctca gggggtgcag atgatgcctg ggcagatgtg gaggacgtca cggaggagga 600 ctgtgctctt cgaagtggtg acacgcatct ttttgataag gtcagaggct atgacatcaa 660 gctgcttcga tacctgtcag tcaaatacat ctgtgacctg atggtggaga acaagaaggt 720 gaagtttggc atgaatgtaa ceteetetga gaaggtggac aaageecage getatgeega 780 cttcactctc ctctccatcc cgtatccagg ctgtgaattt ttcaaggaat ataaagatcg 840 ggattacatg gcagaagggc tcatatttaa ctggaagcag gactacgttg atgccccatt 900 gagcatcccc gacttcctga ctcactctct gaacattgac tggagccagt atcagtgttg 960 ggatctggtg caacaaacac aaaactacct gaagctgctg ctttccttag ttaacagtga 1020 tgatgacage gggetgetgg tacactgtat etcaggetgg gateggacee ecetetteat 1080 ctccctcctg cgcctttcct tgtgggctga tgggctcatc cacacgtccc tgaagcccac 1140 tgagateete taeeteaetg tggeetatga etggtteete ttegggeaca tgttggtaga 1200 tcggctcagc aaaggggagg agattttctt cttctgcttc aattttttga agcatattac 1260 ctccgaggag ttctctgctc tgaagaccca gaggaggaag agtttgccag cccgggatgg 1320 aggetteace etggaagaca tetgeatget gagacgaaag gacegtggea geaceaceag 1380 ccttggcagc gacttctccc tggtcatgga gagttcccca ggagccactg ggagcttcac 1440 ctatgaggcc gtggagctgg tcccagcagg agcgccaact caggcagctt ggaggaagag 1500 ccactcatcc tetecacaga gtgteetetg gaaceggeca caaceeteag aggacegett 1560 gccttcccag caggggctgg cggaagccag gtcttccagc tcctcttcct caaaccattc 1620 tgataacttt ttcaggatgg gtagcagtcc cctggaggtc cccaaaccca gatcagtgga 1680 ccatcccctg cccggatcct ctctctccac agactatggc agctggcaga tggtaacggg 1740 ctgtggcagt attcaggagc gggctgtcct gcacacagac tcctctccc ctttcagctt 1800 eceggatgag etecetaaca gttgtetget tgeageeetg agtgategag agaetegget 1860 graggaggtg cgctcagcct tcttggctgc gtacagcagc acagtggggc ttcgggcagt 1920 agececcagt cetteeggtg ceateggggg cetgetggag caatttgeee gtggtgttgg 1980 acteeggage ateageagea atgeettgtg aagaageeag eecatgaeat ttteetgete 2040 ctctctcage tgagecetta geagagaate aaagecatge etggeegaag gggtacttee 2100 aggtcagggg aaatttcagt cccccatctc catcatgaac atggcagccc caaagctgag 2160 caaggccaaa gacagggttt tccaaccccc agcctcttga ctggtgacca ccacccttc 2220 ttgtcactgt ctcccaccca ccccatcttt gctgggattc ccatcaactc tcagaactgt 2280 gtggggtttc cctggggcct tgtggaagcc atgacttcac aaagacccta cctgtcagtt 2340 cttgtttctg gggaggaggg atcacctgca ctgagaatga ggcagtttga cacagatcac 2400 2440

```
<210> 3375
<211> 2529
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2531)...(681)
<223> similar to gi4884092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3375

```
ttttttttt ttagtacaac aaagctctca accagtttta tttttcctca caatgaacgg
                                                                     60
120
cccatttact ttggaaactg aggagaaaga actgctttcc ccactcgtgt ctgggcaaag
                                                                    180
ggtgtgccca gatgttggca aaggaaccag acaaaatcaa cagccagcag ttttctgttc
                                                                    240
caaacagtta geteetetae agteeagagg gaagetatte etgagtteat teaaggtgae
                                                                    300
agcagaagtg tttctctctt tctgcttggc ccaactgtgc ctgagggctg atggatccag
                                                                    360
accttgtaaa cattcagcta ggtgtaacat aaccagaaag gctgaaggaa ggctcttggc
                                                                    420
cttcccagct tgagaagtag gggcctcatg tgtatctggt ggcctgcaga gcccaaagca
                                                                    480
gagagctatg atgaataaaa tattttatt gcttttctaa aataactcct ttcatataca
                                                                    540
aggatteett cagttaggte atetattate etaaatgete tetggteatg ageaggtgag
                                                                    600
gttctattta gccaagataa gtggctgcct cagagtttct catagggaaa actgaaatct
                                                                    660
gattattttc ttttcttcac atagtctcta ggttgagaac tccaagtagt aagaggcaca
                                                                   . 720
ggataaggat gggagagact gagcattttt gagagaatac teetetgetg aatgecaett
                                                                    780
tgaagggaaa gaagtcgaat ggccatttcc agtccatttt gggttggccc cttggaggct
                                                                    840
gtggcttctg ggtaatgtcc acaaagttca caagagttgt caaagatact tctgtaactt.
                                                                    900
gctgagaatc ctgtatagac tggcactggt ataggaatcg aactcctgat acatgagctt
                                                                    960
gcgggttgga caggagacct acatatgccc acaatacctg gatctccagg gaaactggta
                                                                   1020
tgagacagca ggaagtacag tttatagctg aaatgctgca gtgcctgttg aggatcctgg
                                                                   1080
tecacectee tttetggget gggteageat taccaaagat ggeaacatae tetggtetgg
                                                                   1140
geettecatg aagagtetga taaateteet getgeaagtg getgeagtet geettettea
                                                                   1200
acctgagett geatecagat attgeattea etceaaactg caetteatgt ettttaacag
                                                                   1260
agcaacttcc attaccctgg ctctgtaaga gggtcattga gtaacttata tcatcagtca
                                                                   1320
gagccaagag tggcttccca actatatagc caggattccc acttctagga ctggtgagag
                                                                   1380
aagcagetgt getetgttga aaageeetga agegaaggat gaagtgttge tgtaaggaag
                                                                   1440
cgcctggctc aacagtcagg ttggtttgtc ccaaactgac agaaactttc tggattccaa
                                                                   1500 /
aagtcccatt ggtctctatc tcataggtga cctgagaaac tacattctga caagtgtttc
                                                                   1560
cagccaacag aggagcatta gcctgtgagg taagtattac aggaacctgg aactccatat
                                                                   1620
tctgtggatc agtcatgctt cttggaacct ttaagactgt gaagttatag taagaggcag
                                                                   1680
cattgagggc tgaatccaag gtacagctac tagccaggtt cttgaaaaaa cgagtgcaag
                                                                   1740
ttgtactttt actototagg aaacotgcag gattgottto agcacagagt cocccagoto
                                                                   1800
caactcctgc aggttgtctc agcaagctta ttacagacca cttggggaag taagtaagaa
                                                                   1860
tggggtcccc agccctgtaa aaagatggtg gtgattgtgt ttggaatgtt gaagtgaatg
                                                                   1920
attegeetee aaactetgea geeagggeet ggaagttggt tgeattgaee ttttgaaget
                                                                   1980
tctggaaata gtttaagttt gagttgttca catggacaca aaactgcctg attccattag
                                                                   2040
aatccatgaa aactcttgaa ggaaacgggg aattactcct gaagataaca gagttgtcta
                                                                   2100
cacaaaccca gettgaagac ettacgetge etggaaggea gaaggagaaa actgteeteg
                                                                   2160
gatggagaag atagcagtcc ctgtcgcagc agcaatttat'atcgcaggct ccaggagtca
                                                                   2220
agtcacagac acagatcggt aagactggga agaggtccac agtcctattc ccaggggccg
                                                                   2280
agggagccac gagagtaggg accactgtag ggagtccagg cacggccggg cgagttgcag
                                                                   2340
tegeetetga aggggaetgg agggtteege cateegteee tegetgeage tecaaagaeg
                                                                   2400
tgggcactgc ccctgatggg gaggaagagg gctgaggccg ccacgccatc ggggaacacc
```

```
<210> 3376
<211> 4333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4336)...(404)
<223> similar to gi4033735 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 3376 aaaaatttac ttttccaatc ccccttaaaa ttgggccccc caaggattct tttaaaaggc 60 ccccctttt tttttttt gtacacaaat gtttatttct caattaaaca ttccctttaa 120 acacaaggaa tgagttctaa atcttcataa agatgaatta aaaatgaaat ccctccagta 180 tagtgtatat aatcactgtg ttcttggtca ctactggcat ttactgttta acatcaaaaa 240 caaagacagg ttatttaaaa atcatgctac tggatttcta gctcttcctc tatgaccagt 300 tctacactga tctgcaatgt ttaaaagttt acatcaccaa atcaaagcaa gtttaaggtg 360 tgaagtagct gtgcattaaa cacaaaataa acaataaaat tataagatat agtcaagttc 420 ataacgaata taggtgttet tateategtt gtagattett gggtaatgtg etatgagage 480 gtcctgggaa ccaatgtaga tggagttgta aattttccaa tatacatctc tgactttccg 540 ggctgggtga aacagaccct gtaaacaata ttgcaacatt ctacatggtc caatagcaac 600 tctcaggccc tctagggctc ccataactgc ctgaattaca tgaggagatg tctcaaacac 660 attgggccat acatagttca acaagtgatt cagcgaatct tcacaaccaa atccataaac 720 cccaagtgac atgtgctgta ccactgcact agccgtctgt ctgtgtacaa gqtctctatc · 780 cattaaagca tetteaagta aeggtgttac ggcataaatg tagtetttte ceattteace 840 aatatattca aacaagaagg aaagcgattt taacactcca ttttgaacat tcagttcagg 900 aactctgtat tcattcatta aggcagggag tactgtaaag ggtgaacatg tttctgcaac 960 aatagctatt gctacagtgg tacaaactct gttctgcctt tcttgaactt tgaggttgtt 1020 cagaagtgta gccaatacat catgagggcc aatggccttt gcaatataac caaatgtgtt 1080 gactgtggct ctacgaatag cctttttgtg ggcttttaag agctctaaaa gctcaaaqca 1140 aatcctcatc cactctcttg cagatacata ttcagctccc ctgtcagcaa tacgaccaac 1200 aagatcaata caattotott gtactttttc atgtotgttc tttaagatgg gggtgagtct 1260 aggcagcaga tetttaattg gtggagteat ettatgeata eetatgaeat ttacaatgge 1320 cttcagtgct ccaagaatgc tgcccaatac ttcagggtac tcttcaccca aatactcata 1380 caatacaaca cccaagtgtc ccatcaattt ttcctcttga caagtcttca tgacaacagc 1440 agttcgagaa atcaagtcag ctgcctgttg cctaacttta gcagatttgt tatttaaacg 1500 ccacaaaact gtaccacaga tctgaggcaa gtatggtttg actcgtttgc caagagcatt 1560 aaccactgtg ccaaagccgt tcaacattac tgagtcctct gtagtctgtt cttggaaagc 1620 ataaagaata ccatcaatca gttgttcttc aagtttatga tcaatatctg ctgctcccaa 1680 attgcccata attttctcaa ttgtctccat caccattttt ctgtactgtt cggcttcatc 1740 tttcagatca tccacaatcc tggatataat ttctgctgca cctactttgt ttgccaactc 1800 cacagtagta tcaactaact gtcggtaatt tcttctatcc aaagccatcc tgtgctgcca 1860 gaagtgttta aaaaagggag gaagaatctc tgttttaatg tagtttgctt ctacaccatc 1920 tgtcccacaa cactgtttta ccaccttcag cacaattttt ttcatttcct catcaggaga 1980 ctggaattet cgaataagga ttaacatcac ttetetagta tagtagttgg catattetge 2040 atccataaga ggaataagat acccaatagc cttcaagaaa gcagccaaac cctttcctct 2100

```
9tgttggcgg ataccettce ataaaqqett taacacagaa teaaaagatt cgataccata
                                                                     2160
aggagttgct gcttcagcca aggcagcaat ggccaaagca ctgatggtcc gaactttctg
                                                                     2220
ctgctcatcc acaagaccat gttcaatgat ttcaactaaa cttctaagat gtggcaagat
                                                                     2280
ggcacagccc ataagaatag ctatctgttg tacaatctta ataccagtgt gtctcgcttg
                                                                     2340
ccaggacttc ttgcttttgc acacagcttt taagaagggc aataaagaag gaatgcccag
                                                                     2400
ggcagaggct acaacagcaa aagctctagc tgttgtgtta cggacatact catccatgtt
                                                                     2460
atctatatca ggtctcatgg tagagatcat agtagccaga ccagcagcct ttgccaaatt
                                                                     2520
agaaatgatc tctcggcctt ccactctagc atagtaatct tcatcaatca atagcggttc
                                                                     2580
aatgaccacg aggatettat geacatatgg acgaactaag teatcaagtt tgtacagtat
                                                                     2640
cctatcaata actttcacaa gtaaatgacg ctcttgatgc tcaagtgtag gagacatcaq
                                                                     2700
cagaggaaga atctgattaa acaaaggacc agctccaaat tcacgagctt tatcagtaat
                                                                     2760
ctgacgcaat gcagcctttc tcattggtgg tgttccattc ttaattttta aaagcaactt
                                                                     2820
cattattttt ctctctttt gctcttctgg tactaagtgt tgattcatca acatcaacca
                                                                     2880
atagtttatc aaagtattga atatcatcag gttttaaaaaa tggaagattt ccagatggct
                                                                     2940
ggtcattaac acttttcata gttcgatctt cagtttgcat gtggaaacca gtcataccac
                                                                     3000
ccaaaggtgt tggagtagct gtcagctttc gagctggagt tcgaatagga acataaccaq
                                                                     3060
ctggaggagg aagtacctta tatccttctg ggaacatagc atctaattcc tcatcagaaa
                                                                     3120
gtgggcgatt teteteatea atttetettt eecacegeea ageetgaage tgtteaggag
                                                                     3180
tcatactcat tatgtgacct ggagtagggg tagccatgtt catggctggt gtgccaattg
                                                                     3240
gtgtctttcc aggggtcaga actggagtgc ttccacccat ctgactagct ggtgtttcat
                                                                     3300
eccacegtga ttttetttta etggetecag gagteggtgt tteaccaata gaatetecae
                                                                     3360
ctcgatctgt tcgaggagtc tcagcccatc cacttccatg cccaggagta tctctcctct
                                                                     3420
gttttggggg tttcaatccc catctgtttt taacgaagca actggaagtt gcgcctccca
                                                                     3480
tggccctggt gtcggcatgg ccctggtgta tcacctcgtc ccaggagtag caagctcccc
                                                                     3540
gctggttgtg tggctaggtt gtaggatccc atatttttga gcctggggtt gctcccagga
                                                                     3600
gtctcgcttc cctttgcacg acctggtgtc tcatcccatc ttaaggaagg agtatgccca
                                                                     3660
ggggtctctg cctgatccca acttgatagt tttttgggag tggcaccagg agtctgatca
                                                                     3720
gctgtttgat cccaacgccg ttttcgtttt gatggaggct gggacgctgc tgctccattg
                                                                     3780
acgaetttta gttetecage tttagetttt tetgetaget gttgeetaat ttetegttet
                                                                     3840
tetttagtea agtgttgtte tegeattaca tecatgtaag teetageatt cattttagga
                                                                     3900
tcaggggttt tccctccatc tgcaaaagga tcaagacgct ctggggaaat tatcatggtc
                                                                     3960
egectatget ttttgtatte atetteeegg tetgeaatet ttggaggtet gtgeteagea
                                                                     4020
aatggatcat actgttctgt tgactgtggt atatcattaa gcaatgccac aggggcatga
                                                                     4080
tatcctggct tcttctgacc aagcaaactc gtagatgatg aatagtcatc gtcatcatct
                                                                     4140
tcaagttcag ttgcagcaat tgatgtcacg tatccagcaa atctgctgtc acttccacca
                                                                     4200
taaattteet ggteataata aeetgtagaa tegaggeeca eteettgage tteateaaga
                                                                     4260
getgeettet tgeettgaat ttetegaate tgtgetteaa tatettegtg agtettggeg
                                                                     4320
atcttcgcca ttt
                                                                     4333
```

```
<210> 3377
<211> 835
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(836)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (835)...(251)
<223> similar to gi3493462 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3377
ttttttttt ttaactggaa agtataccaa tttcacttta ttagcctaat ttaggaatag
                                                                       60
gatgaggaga gcggggttga ggtcaggcat gaaggaagag ggtaaaaact tgtgatggtt
                                                                      120
aagatccctt cagaactctg gtgcagtcct caatcactgc agctttactg tcagtcagtg
                                                                      180
gagetgeaat ccaaaagaeg gaaaategae teetgtttte eatttetgtg teeagtgaet
                                                                      240
cttcagttac agtgtgatga ggtctaccag gttgccttta ggaggagtca tgctgtcagg
                                                                      300
aaagaaattt actaaggtgt caaagagctg agttctttga gcataggtgt gatccacatc
                                                                      360
agaaaagccc agagctgtaa aatctgaacc agatttgaat agagctgatg ccaggagctg
                                                                      420
aaactetttt gtetettetg ggtetgaatg atecacagtt atataaagat cattttgtaa
                                                                      480
atatttcaga gcactaaggg gatccacttg ggccttttct tcaaacctqt qttttcttat
                                                                      540
gaggtacttg caatgcctca gtaaataatc ttttgaaggt ctacacaact tcagtgacca
                                                                      600
gaagtcatct aatctcatct ttggagagca agattttcct ggattcccac caaataagta
                                                                      660
atgaaccttg tgtagctcat cgtatacaag ctgatgggca accttggac atggttcttc
                                                                      720
ttcctgaaga cttttagttg gattatcctt tgcagcttga tcantcttat agacacaaga
                                                                      780
cctgcaagac attgcaacta tncctcacaa tgtcataaat ccagaatgaa tttct
                                                                      835
```

```
<210> 3378
<211> 1700
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (6)...(843)
<223> similar to gi3881528 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3378
ggcacgagga gctggcacag gctgcactgc gcaggcacaa gggcatgctg ggtaagcgat
                                                                       60
acattgaact cttccggagc actgcagccg aagtgcagca ggtcttgaac cgctatgcat
                                                                      120
ceggeceact cettectaca etgactgee cactgetgee cateceette ceactggeac
                                                                      180
ctgggactgg gagggactgt gtacgcctcc gaggcctgcc ctacacggcc accattgaag
                                                                      240
acatectgag etttetgggg gaggeageag etgacatteg geeceaeggt gtacacatgg
                                                                      300
tgctcaacca gcagggccgg ccatcgggcg atgccttcat tcagatgaca tcagcagagc
                                                                      360
gagecetage tgetgeteag egttgecata agaaggtgat gaaggagege tacgtggagg
                                                                      420
tggtcccctg ttccacagag gagatgagcc gagtgctgat ggggggcacc ttgggccgca
                                                                      480
gtggcatgtc ccctccaccc tgcaagctgc cctgcctctc accacctacc tacaccacct
                                                                      540
tecaagecae eccaaegete atteceaegg agaeggeage tetataeece tetteageae
                                                                      600
tgctcccagc tgccagggtg cctgctgccc ccacccctgt tgcctactat ccagggccag
                                                                      660
ccactcaact ctacctgaac tacacagcct actacccaag tgttgtccca gtcaggagcc
                                                                      720
ttggtccgca tgcagggtgt cccatacacg gctggtatga aggatctgct cagcgtcttc
                                                                      780
caggeetace agetaceege tgatgactae accagtetga tgeetgttgg tgacceaect
                                                                      840
cgcactgtgt tacaagcccc caaggaatgg gtgtgtttgt aggagagaaa gccaggaggt
                                                                      900
aagagccage tgatateete ggegaacatg teteteetga gtecagaaga ecageaceet
                                                                      960
caacctggta gcttctttct ggcttgtcaa agctctcaga aggtacctag aggagcccaa
                                                                     1020
```

```
gccccagete catectecae ttattetgee tgttteeece aaagacaatg getggaceet
                                                                     1080
gcatgcaggg ctgggggtgg aatggggcta accagctcct gatggcctga gccaggcatc
                                                                     1140
ttgactggca cctggagagc ccttaagtct gtcctggctg tggcccatgc cgacagatat
                                                                     1200
cgtggggctg acaggtccac ggcaggcttg ctttcttta taaaatggaa gctctggtac
                                                                     1260
cttcaatgta tgactcctgg gagaatcaag ggtccatctg agcctctgag taaagatccc
                                                                     1320
aatgttetae eteteeetgt eeetettgta ggggataggg aggeagagag ageeageeee
                                                                     1380
tacceteaga gtatetggae eteagagaee atgttgtgee aggggtggte eeacetaaag
                                                                     1440
atgctagccc ctctccaggt gggcataagg agtaacagat ggcaaaacca caaactattt
                                                                     1500
tgatggactg tgctgcagta tcaccagaag acattagggg gcagtaggcc cccacacaaa
                                                                     1560
accttcaggc ttgaatttta aaggggagga ctttctgcca acttttcttg tatgccttgg
                                                                     1620
gaaagecagt tgeeetgaae eeageagaea eeatggaatg teetttgeae geattaaatg
                                                                     1680
gtacagaact gaagcctcgg
                                                                     1700
```

```
<210> 3379
<211> 1549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(1294)
<223> similar to gi310102 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3379 aggacgagga tgtttctgga agaaaaaatc ccctcgattt ctgatttaaa gctagcaatt 60 cgaagagcta ctctgaaaag atcatttact cctgtatttt tgggaagcgc cttgaagaac 120 aaaggagtte ageetetttt agatgetgtt ttagaatace teecaaatee atetgaagte 180 cagaactatg ctattctcaa taaagaggat gactcaaaag agaaaaccaa aatcctaatg 240 aactccagta gagacaattc ccacccattt gtaggcctgg cttttaaact ggaggtaggt 300 cgatttggac aattaactta tgttcgcagt tatcagggag agctaaagaa gggtgacacc 360 atctataaca caaggacaag aaagaaagta cggttgcaac ggctggctcg catgcatgcc 420 gacatgatgg aggatgttga ggaagtatat gccggagaca tctgtgcatt gtttggcatt 480 gactgtgcta gtggagacac attcacagac aaagccaaca gcggcctttc tatggagtca 540 atteatgtte etgateetgt cattteaata geaatgaage ettetaacaa gaacgatetg 600 gaaaaatttt caaaaggtat tggcaggttt acaagagaag atcccacatt taaagtatac 660 tttgacactg agaacaaaga gacagttata tctggaatgg gagaattaca cctggaaatc 720 tatgctcaga ggctggaaag agagtatggc tgtccttgta tcacaggaaa gccaaaagtt 780 gcctttcgag agaccattac tgcccctgtc ccgtttgact ttacacataa aaaacaatca 840 ggtggtgcag gccagtatgg aaaagtaata ggtgtcctgg agcctctgga cccagaggga 900 ctacactaaa ttggaatttt cagatgaaac attcggatca aatatttcca aagcagtttg 960 tgcctgctgt agaaaagggg tttttagatg cctgcgagaa gggccctctt tctggtcaca 1020 agetetetgg geteeggttt gteetgeaag atggageaca ceacatggtt gattetaatg 1080 aaatctcttt catccgagca ggagaaggtg ctcttaaaca agccttggca aatgcaacat 1140 tatgtattct ttgaacctat tatggctgtg gaagttgtag ctccaaatga atttcagggg 1200 acaagtaatt ggcaggaatt aaccgacgcc atggggtaat cactgggcaa gatggagttg 1260 aggactattt tacactgtat gcagatgtaa gtagtcttgg tcattggcag tcctgctttt 1320 attaaccata gaaggaaatc caggttagct tttgtttttg caaatggaca catttccttg 1380 ctgaatttgt ggctttatac atgtggcatt ttctgtaatt tgctattaaa gcaactctta 1440 agtgcagaag ttaaaaataa gatttatttt atcttgacct tttgtgaatg tgtcattttc 1500

```
<210> 3380
<211> 2580
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1976)
<223> similar to gi1556399 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3380
 ggcacgaget gtgttccgac atctacctaa agttctatga acctcaagat agagatgatc
 tetattttta eattgeeaca taeetagage aceatgtgge ggageacaet getgagaget
                                                                       120
 acatgctgca gtggcagcgt ggacaccttt ccaactatca gtacctcctt cacctcaaca
                                                                       180.
 acctggccga ccgcagctgc aacgacctct cccagtaccc tgtgtttcca tggataatac
                                                                       240
 atgattatto cagotoagaa otagatttgt caaatocagg aacottoogg gatotoagta
                                                                       300
 agccagtagg ggccctaaat aaggaacggc tggagagact actgacacgc taccaggaaa
                                                                       360
 tgcctgaacc aaagttcatg tatgggagtc acctactctt ccccgggtta tgtactttt
                                                                       420
tatettgtta ggattgcace cagagtatat getgtgcetg cagaatggaa gatttgataa
                                                                       480
 tgcagataga atgttcaaca gtattgcaga aacttggaaa aactgtctgg atggtgcaac
                                                                       540
ggattttaaa gagttaattc cagaattcta tggtgatgat gtgagctttc tagtcaatag
                                                                       600
cctgaagttg gatttgggaa agagacaagg aggacagatg gttgacgatg tggagcttcc
                                                                       660
cccttgggct tecagteceg aggaetttet ccagaagage aaagatgcat tggaaagcaa
                                                                       720
ttatgtgtct gaacaccttc acgagtggat tgatctaata tttggctaca aacaaaagg
                                                                       780
gagtgatgca gttggggccc ataatgtatt tcatcccctg acctatgaag gaggtgtaga
                                                                       840
cttgaacagc atccaggatc ctgatgagaa ggtagccatg cttacgcaaa tcttggaatt
                                                                       900
tgggcagaca ccaaaacaac tatttgtgac accacatcct cgaaggatca ccccaaagtt
                                                                      960
taaaagtttg tcccagacct ccagttataa tgcttctatg gcagattccc caggtgaaga
                                                                     1020
gtcttttgaa gacctgaccg aagaaagcaa aacactggcc tggaataaca tcaccaaact
                                                                     1080
gcagttacac gagcactata aaatccacaa agaagcagtt actggaatca cggtctctcg
caatggatct tcagtattca caacatccca agattccacc ttgaagatgt tttctaaaga
                                                                     1200
atcaaaaatg ctacaaagaa gtatatcatt ttcaaatatg gctttatcgt cttgtttact
                                                                     1260
tttaccagga gatgccactg tcataacttc ttcatgggat aataatgtct atttttattc
                                                                     1320
catagcattt ggaagacgcc aggacacgtt aatgggacat gatgatgctg ttagtaagat
                                                                     1380
ctgttggcat gacaacaggc tatattctgc atcgtgggac tctacagtga aggtgtggtc
                                                                     1440
tggtgttcct gcagagatgc caggcaccaa aagacaccac tttgacttgc tggccgagct
                                                                     1500
ggaacatgat gtcagtgtag atacaatcag tttaaatgct gcaagcacac tgttagtttc
                                                                     1560
cggcaccaaa gaaggcacag tgaatatttg ggacctcaca acggccacct taatgcacca
                                                                     1620
gattccatgc cattcaggga ttgtatgtga cactgctttt agcccagata gtcgccatgt
                                                                     1680
cctcagcaca ggaacagatg gctgtcttaa tgtcattgat gtgcagacag gaatgctcat
                                                                     1740
ctcctccatg acatcagatg agccccagag gtgctttgtc tgggatggaa attccgtttt
                                                                     1800
atctggcagt cagtctggtg aactgctcgt ttgggacctc cttggagcaa aaatcagtga
                                                                     1860
gagaatacag ggccacacag gtgctgtgac atgtatatgg atgaatgaac agtgtagcag
                                                                     1920
tatcatcaca ggagggaag acagacaaat tatattctgg aaattgcagt attaagtgcc
                                                                     1980
ttitcctctc ctgaatatta aattgaactc tatttaatgc atttttaaac caaactttta
                                                                     2040
aacggactgg tgaatgtgca atgttagtaa ttagaagttt taccacatgg aaaatttgtg
                                                                     2100
gttttaaact ttctaaatca tggtgacttc attgaaagcc attagttgct attctcttag
                                                                     2160
```

```
ggcagataaaatgcggctgtgttaggaaaaacatgttacactgtaaggcagatgatcgtc2220cccgtatgatgattgtcagaagacaggactaagtagcagagaatagctaagagataaatt2280gggctggggaaacttgtcagaaagcactgaacaattaagaaattttccaagaaaatgtgc2340agtattctctgctacttctgaatctgtttgtcttcctaatctatcacaattgccaccca2400tcgggttttgggtgtgtgttttcatagcgtggttactttctataatgctgtacccagatt2460ctaagaacctggagaaggattagcagttcttagtaagtttactgtgtataggaacggttt2520gtatttcattacagctattcatctttctacattaaaaatattttctctaaaaaaaaaa2580
```

```
<210> 3381
<211> 2825
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2407)
<223> similar to gi3822218 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3381 caagtggctg cgggacactg ctgccagacc tgcccccagg agcgcagcag ttcggagcgg 60 cageegageg geetgteett egagtateeg egggaeeegg ageategeag ttatagegae 120 cgcggggagc caggagctga ggagcgggcc cgtggtgacg gccacacgga cttcgtggcg 180 ctgctgacag ggccgaggtc gcaggcggtg gcacgagccc gagcctcgct gctgcgctct 240 agceteeget tetetatete etacaggegg etggacegee etaceaggat eegettetea 300 gaccccaatg gcagtgtcct gtttgagcac cctgcagccc ccacccaaga tggcctggtc 360 tgtggggtgt ggcgggcagt gcctcggttg tctctgcggc tccttagggc agaacagctg 420 catgtggcac ttgtgacact cactcaccct tcaggggagg tctgggggcc tctcatccgg 480 caccgggccc tggctgcaga gaccttcagt gccatcctga ctctagaagg ccccccacag 540 cagggcgtag ggggcatcac cctgctcact ctcagtgaca cagaggactc cttgcatttt 600 ttgctgctct tccgagggct gctggaaccc aggagtgggg gactaaccca ggttcccttg 660 aggetecaga ttetacacca ggggeageta etgegagaac tteaggeeaa tgteteagee 720 caggaaccag getttgetga ggtgetgeec aacctgacag tecaggagat ggactggetg. 780 gtgctggggg agctgcagat ggccctggag tgggcaggca ggccagggct gcgcatcagt 840 ggacacattg ctgccaggaa gagctggcga cgtcctgcaa agtgtccttt gtggggctga 900 tgccctgatc ccagtccaga cgggtgctgc cggctcagcc agcctcacgc tgctaggaáa 960 tggctccctg atctatcagg ccgtgggtat ctgccctggg ctgggtgccc gaggggctca 1020 tatgctgctg cagaatgagc tcttcctgaa tgtgggcacc aaggacttcc cagacggaga 1080 getteggggg caegtggetg ecetgeeeta etgtgggeat agegeeegee atgacaeget 1140 gcccgtgccc ctagcaggag ccctggtgct accccctgtg aagagccaag cagcagggca 1200 egectggett teettggata eccaetgtea eetgeactat gaagtgetge tggetggget 1260 tggtggetea gaacaaggea etgteactge ecaceteett gggeeteetg gaacgecagg 1320 gcctcggcgg ctgctgaagg gattctatgg ctcaaaggcc cagggtgtgg tgaaggacct 1380 ggagccggaa ctgctgcggc acctggcaaa aggcatggcc tccctgctga tcaccaccaa 1440 gggtagcccc agaggggagc tccgagggca ggtgcacata gccaaccaat gtgaggttgg 1500 cggactgcgc ctggaggcgg ccggggccga gggggtgcgg gcgctggggg ctccggatac 1560 agectetget gegeegeetg tggtgeetgg teteceggee etagegeeeg ccaaacetgg 1620 tggtcctggg cggccccgag accccaacac atgcttcttc gaggggcagc agcgcccca 1680 eggggetege tgggegeeca actacgaece getetgetea etetgeacet gecagagaeg .1740 aacggtgatc tgtgacccgg tggtgtgccc accgcccagc tgcccacacc cggtgcaggc 1800

```
1860
tecegaceag tgetgeeetg tttgeeetga gaaacaagat gteagagaet tgeeaggget
gccaaggage egggaeeeag gagagggetg etattttgat ggtgaeegga getggeggge
                                                                     1920
agegggtaeg eggtggeace eegttgtgee eecetttgge ttaattaagt gtgetgtetg
                                                                     1980
cacctgcaag gggggcactg gagaggtgca ctgtgagaag gtgcagtgtc cccggctggc
                                                                     2040
ctgtgcccag cctgtgcgtg tcaaccccac cgactgctgc aaacagtgtc cagtggggtc
                                                                     2100
gggggcccac ccccagctgg gggaccccat gcaggctgat gggccccggg gctgccgttt
                                                                     2160
tgctgggcag tggttcccag agagtcagag ctggcacccc tcagtgcccc cttttggaga
                                                                     2220
gatgagetgt ateacetgea gatgtgggge aggggtgeet caetgtgage gggatgaetg
                                                                     2280
ttcactgcca ctgtcctgtg gctcggggaa ggagagtcga tgctgttccc gctgcacggc
                                                                     2340
ccaccggcgg ccagccccag agaccagaac tgatccagag ctggagaaag aagccgaagg
                                                                     2400
ctcttaggga gcagccagag ggccaagtga ccaagaggat ggggcctgag ctggggaagg
                                                                     2460
ggtggcateg aggacettet tgeattetee tgtgggaage ceagtgeett tgeteetetg
                                                                     2520
teetgeetet aeteeeacee eeactaeete tgggaaceae ageteeacaa gggggagagg
                                                                     2580
cagctgggcc agaccgaggt cacagccact ccaagtcctg ccctgccacc ctcggcctct
                                                                     2640
gtcctggaag ccccaccct ttcctcctgt acataatgtc actggcttgt tgggatttt
                                                                     2700
aatttatett caeteageae caagggeeee egacaeteea eteetgetge eeetgagetg
                                                                     2760
agcagagtca ttattggaga gttttgtatt tattaaaaca tttctttttc agtcaaaaaa
                                                                     2820
                                                                     2825
```

```
<210> 3382
<211> 1504
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1093)
<223> similar to gi5262621 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3382
gcgggcgccc caaagcagtg cgggaacagc tactggcgct gtccgcctgc gccccgttca
                                                                       60
atgtgcgctt caagaaggat cacgggctgg tggggcgagt gttcgccttc gatgctactg
                                                                      120
cocgtectec aggatacgag trogagetga agetetteac egaatacece tgtggtteeg
                                                                      180
gcaatgtgta cgccggcgtc ctggcagtgg ctcgccagat gttccacgat gctctgcggg
                                                                      240
agccgggcaa ggcactggct tcttcgggct tcaagtacct cgaatatgaa cgccggcatg
                                                                      300
gatcaggaga atggcggcag ctgggcgagc tgcttaccga cggcgtccgc agcttccgcg
                                                                      360
agccagetee egeggaggee etgeeceage agtacecaga geeggeeeet geggetetet
                                                                      420
gtggcccacc cccgcgagcc ccatcccgga acctggcgcc cacgccgcgc cgtcgcaagg
                                                                      480
cateceeega geeggaggge gaggeggetg ggaagatgae caeegaggag cageagcaae
                                                                      540
ggcactgggt ggcacccggc ggcccgtact ccgctgagac ccctggtgtg ccctcgccca
                                                                      600
ttgccgccct gaagaatgtg gccgaagccc tgggccactc acccaaggac cctggcggag
                                                                      660
gcggggggcc tgtgcgtgca gggggcgcca gccctgcagc ctcctccacg gcccagccgc
                                                                      720
caacccagca tegeettgtg geeegeaacg gegaageaga agteagteec acageggggg
                                                                      780
ccgaagctgt cagcggggt ggcagcggca ctggggcgac ccctggggcc ccctgtgct
                                                                      840
tgtaccctgt gcagggagcg gctagaagac acccacttcg tccaggtgcc ctccggtgcc
                                                                      900
cgaacacaag ttctgcttcc cctgctcccg gaagttcatc aaggcgcagg gcccggccgg
                                                                      960
ggaaggtgta ctgcccgagc ggagacaagt gcccgctggt cggctcctcc gtgccctggg
                                                                     1020
cettcatgca gggcgagate gccaccatee ttgctggaga catcaaagtt aagaaagaac
                                                                     1080
gggaccecta ggetaceact geeteeagge tactgeeete tgeecetttg ceacceaceg
                                                                     1140
```

```
ctgccgcgga taaattatte cctccccgae ccagcccagt gccaccteta tctgtgtaca 1200 tactccctte ttccacccag atgggtccc tggggtagat gcattgtggg tgggggggaga 1260 aagcttgtgg ctcctgtccg agggggtgtt tggggtccct tggcccctce agtttccctc tgtcctcctt ggctctcctt tgtagttggg ggagaggtge cccctcctc 1320 cttgagaagg gacctcctga aaactcgctc tttataaacg aggcaaaagc atttaattcc 1440 cacccccca cccccgctc ccttctgctc cttcaataaa ccgaaagatg ggttttttt 1500 tttc
```

```
<210> 3383
<211> 1333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(1247)
<223> similar to gi5442271 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3383 gccaggccgg caccaggcac agacacttat gcccttgttg ggagaacaga gagaggctct 60 cttgtccact gcctgtcttc ggttccaact gctggttctc ctagaggcct ctcctcagac 120 tegcagaget geetgateat tgetacagaa tgaactetag eecagetggg acceeaagte 180 cacagecete cagggecaat gggaacatea acetggggee tteagecaae ecaaatgeee 240 agcccacgga cttcgacttc ctcaaagtca tcggcaaagg gaactacggg aaggtcctac 300 tggccaagcg caagtetgat ggggcgttet atgcagtgaa ggtactacag aaaaagteca 360 tettaaagaa gaaagageag ageeacatea tggeagageg cagtgtgett etgaagaacg 420 tgcggcaccc cttcctcgtg ggcctgcgct actccttcca gacacctgag aagctctact 480 tegtgetega etatgteaac gggggagage tettetteca eetgeagegg gagegeeggt 540 teetggagee eegggeeagg ttetacgetg etgaggtgge eagegeeatt ggetacetge 600 actocotoaa catoatttac agggatotga aaccagagaa cattotottg gactgocagg 660 gacacgtggt gctgacggat tttggcctct gcaaggaagg tgtagagcct gaagacacca 720 catccacatt ctgtggtacc cctgagtact tggcacctga agtgcttctg gaaagagcct 780 tatgatcgag cagtggactg gtggtgcttg ggggcagtcc tctacgagat gctccatggc 840 ctgccgccct tctacagcca agatgtatcc cagatgtatg agaacattct gcaccagccg 900 ctacagatec ceggaggeeg gacagtggee geetgtgace teetgeaaaq cetteteeae 960 aaggaccaga ggcagcggct gggctccaaa gcagactttc ttgagattaa gaaccatgta 1020 ttcttcagcc ccataaactg ggatgacctg taccacaaga ggctaactcc accettcaac 1080 ccaaatgtga caggacetge tgacttgaag cattttgace cagagttcae ecaggaaget 1140 gtgtccaagt ccattggctg tacccctgac actgtggcca gcagctctgg ggcctcaagt 1200 gcattcctgg gattttctta tgcgccagag gatgatgaca tcttggattg ctagaagaga 1260 aggacctgtg aaactactga ggccagctgg tattagtaag gaattacctt cagctgctag 1320 gaagagctgt att 1333

<210> 3384 <211> 1067

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(498)
<223> similar to gi3135264 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3384
gttccgggag gcgcgtgggg cttgaggccg agaacggccc ttgctgccac caacatggag
                                                                       60
actitigtace gigicocgit citagigete gaaigteeca accigaaget gaagaageeg
                                                                      120
ecctggttge acatgeegte ggecatgact gtgtatgete tggtggtggt gtettaette
                                                                      180
ctcatcaccg gaggaataat ttatgatgtt attgttgaac ctccaagtgt cggttctatg
                                                                      240
actgatgaac atgggcatca gaggccagta gctttcttgg cctacagagt aaatggacaa
                                                                      300
tatattatgg aaggacttgc atccagcttc ctatttacaa tgggaggttt aggtttcata
                                                                      360
atcctggacc gatcgaatgc accaaatatc ccaaaactca atagattcct tcttctgttc
                                                                      420
attggattcg tctgtgtcct attgagtttt ttcatggcta gagtattcat gagaatgaaa
                                                                      480
ctgccgggct atctgatggg ttagagtgcc tttgagaaga aatcagtgga tactggattt
                                                                      540
gctcctgtca atgaagtttt aaaggctgta ccaatcctct aatatgaaat gtggaaaaga
                                                                      600
atgaagagca gcagtaaaag aaatatctag tgaaaaaaca ggaagcgtat tgaagcttgg
                                                                      660
actagaattt cttcttggta ttaaagagac aagtttatca cagaattttt tttcctgctg
                                                                      720
gectattget ataccaatga tgttgagtgg cattttettt ttagttttte attaaaatat
                                                                      780
attccatatc tacaactata atatcaaata aagtgattat tttttacaac cctcttaaca
                                                                      840
ttttttggag atgacatttc tgattttcag aaattaacat aaaatccaga agcaagattc
                                                                      900
cgtaagctga gaactctgga cagttgatca gctttaccta tqqtqctttq cctttaacta
                                                                     960
gagtgtgtga tggtagatta tttcagatat gtatgtaaaa ctgtttcctg aacaataaga
                                                                     1020
tgtatgaacg gagcagaaat aaatactttt tctaattaaa aaaaaaa
                                                                     1067
```

```
<210> 3385
<211> 1748
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1749)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1326) ... (0)
<223> similar to gi4587129 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3385
gttagcaaaa tacccattta ttaagaaaaa gttggtgtcc tttgctacca aaagggaaga

```
aaaggggant aaaacaaata cgtagttact agcaacaaaa taagacaaac taatcagaaa
                                                                      120
tgctgtttat tgacaagata gggtgtcaca aatacatcat ttatagggag agaggggaca
                                                                      180
tgaacaagtc ccaaaatctt ataccttctg cacagcaagc ccagcagggg atgtcctctc
                                                                      240
tagagategg tttatecaag ggtaceceat gagaagggea geteettgan tgeagetgee
                                                                      300
gggaagagca tcgcacaccg gttccgtctc ctggggtctt cccccagggt aatggtaaaa
                                                                      360
gtctggccct ggaaagtaaa cgaacgtccc ttgatgcggt tcntttgcaa gtcaaacctt
                                                                      420
tggcaaaaaa tagttettgg cetteaattg aggttteteg aatggcaage eteceagage
                                                                      480
tttctgcttt tctttcgggc tgatccgtag ggaaggcttg cttgaagcca cccggggaac
                                                                      540
tttggccact taaggaacat gggcacgacc tttgtcccag gatagccccg tcaacccaag
                                                                      600
atggggctcg atgggccatg ttggagaaga tttaaggcct tttcttggga ttcccaagaa
                                                                      660
tgaactgcgc aaaagccaag ttcagcactg tttcagaggc caagtactgt aaccggtaat
                                                                      720
tecetggagg gggenecaat agttttagng egeeneaceg tngaeetega gggggggeee
                                                                      780
gtacccaatt cgccctgcag gagcatggca gcgcgatggt aggggaggaa gatcqccaqt
                                                                      840
acagttetge caeggaeagt aggaeaetga teaceattte tgtgttette agtttetgae
                                                                      900
aatgaaccaa caatttttgt aaaagcttat gtgcttctga catttggttc tgagattgta
                                                                      960
atacaaccgc tttcctataa accaccctct atgctattga ggagctgtga attccctgta
                                                                     1020
accaagtgaa tcaagccaaa atggatattt gccaatcatt tcaattgctc tgtcaaaact
                                                                     1080
gtattttttg atcacataag catccataac tgggcgtgct tgactattag gcggaaatcg
                                                                     1140
gttccttcaa agtgctttaa cacttcagaa gctgcaggca aaacagccct gctccgcgtg
                                                                     1200
taagetetge gaggtggeag agtgegaeag caaaggaete tgtgttgtte tgetgeaege
                                                                     1260
ecegeattee accectece aggetette atgeteagea acatetegge etgttegeagt
                                                                     1320
gccatggtgc tgcgggccat acagcctcca gatggccgtt tttctgtgcg atgctgatat
                                                                     1380
cgatgagctc tgacaggctg tgtttccagt gcaggaggtc ggagtccttt agggcatcca
                                                                     1440
tragettgtt tgccgtette ccageaaaag eteteggtaa eccaaaatgt actgeettet
                                                                     1500
tcacagaatg ctccagcaga acatagctat cggatctctt ctgccccagc acataaagcc
                                                                     1560
ageteaaaca gtgetggaga cacaegtgat egttggaete etgggeaate etaattgeet
                                                                     1620
cctgcagggc gagctctgcc tgttgatagt gaccgaagcg gcagtgcagg gcggcaagat
                                                                     1680
tcagagcggc gtatctcaag ctccggccat agccctcttc cccattactt ttgcttcgga
                                                                     1740
cgcgtggg
                                                                     1748
```

```
<210> 3386
<211> 3032
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(642)
<223> similar to gi5410355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3386
ggcacgagga ttcgaggagt agtgctattt tttattggag tatttcttgc attagtgttå
                                                                       60
aatttacttc agattcagag aaatgtgacg ctctttccac ctgatgtgat tgcaagcatc
                                                                      120
ttttcttctg catggtgggt acccccatgc tgtggcacgg cttctgctgt gattgggtta
                                                                      180
ttatacccct gcattgacag acatctagga gaaccacata aatttaaaag agagtggtcc
                                                                      240
agtgtaatgc ggtgtgtagc agtctttgtt ggtataaatc atgccagtgc taaagtggat
                                                                      300
ttcgataaca acatacagtt gtctctcaca ctggctgcac tatccattgg actgtggtgg
                                                                      360
actititgata gatctagaag tggttttggc cttggagtag gaattgcctt cttggcaact
                                                                      420
gtggtcactc aactgctagt atataatggt gtttaccaat atacatctcc agatttcctc
                                                                      480
```

```
tatgttegtt ettggttace atgtatättt tttgetggag geataacaat gggaaacatt
                                                                   540
ggtcggacaa ctggcaatgt acgaatgtaa agttatcgca gaaaaaatcc catcaggaat
                                                                   600
gaagaaggca aaaaatatct tttgtacaga aaagcaagat gaaaaggatg tgaaatggta
                                                                   660
gatataccaa caaaacttca gactgtaaaa ttgccaggat gcagttttcc ccttgattgg
                                                                   720
ccgtgtgtgt atatatggaa taaatatata tatacacaca cacatattac tgcaatcctg
                                                                   780
tgattgcttc atctgtaaat cagttgtaaa cctttacata tttgacttaa ataactgtaa
                                                                   840
900.
ttaaaacatg ccatacattg tatcacaatg ttaatgtgcc aagatattgt tcctgtcatg
                                                                   960
1020
caaaaacaaa caaacaaaaa gcatatgggg agctggtatt ttctctttag cttactgttg
                                                                  1080
tgccttttta tttttctaat cacagcagta tgagttatga gtgccctaat ttgtggttag
                                                                  1140
tttctaattt aatgttgttt catagagttt ggagtgtttt gatacagggt gaaaatgaac
                                                                  1200
ttctggtttc aaacctgcgt tactggagac agcccaaaga gtaattttct gttttgacag
                                                                  1260
gttttactgg aagtatatgt gatgagcaga agaggttatc agcattaaat tgttttggtt
                                                                  1320
ctaaatttgg aacagtatat ataattaaaa gtaaggaaca ttagaggatt taattagaat
                                                                  1380
aaatacatgt tttggaaata cagtgacctc ttgcagtgtc acaaaagtgc aaagtgatat
                                                                  1440
tagctgtcat ctgcaataca gaatctcatt gcttttgcac atggagcata taggaaactc
                                                                  1500
caaacagatc acaatgaggg titctaaatc tgttggggtt ctgtcttctt attggggttc
                                                                  1560
tgtgaaggca aaccactgta ggctttagct ggggttcagt catatggact tcgttgggtg
                                                                  1620
gggatggcct agggtttttc atcttacatg cagtcttggg gggtgggatg aatacataat
                                                                  1680
ttettatgta ttegtgtate cattagtgaa tagtteaagt etgtttaaga gtgtattgag
                                                                  1740
atggcattet etgeatgtta aagatettaa tggcaaceag cacetettaa gtatggttta
                                                                  1800
aacatattet tagetaattt ttteeattag tttttgaaat tggtggeagt tgtetgatee
                                                                  1860
acaagggcaa gatettetga gtaetetggg gtgtgagtat gtgtgcacae gtgtgtqttq
                                                                  1920
gagtgagtga gagaatgtgt ctgtgcatgt ggccatgctt tcctagaatg tcaagtagat
                                                                  1980
atttttacac tttgagtttt aaagcaatta ctatcagact gagatcttgt atgccaaact
                                                                  2040
ttaatctgct tttatgtttt caggctgaag gtgtgaaaat cctaagagga tttcatattg
                                                                  2100-
aatatgtgta cacaatctta actatcgtgg tggaaaacat actactataa tttattatta
                                                                  2160
tatetteeag ataatgttat teatttagaa caaataaggt atatttttta gaateaaett
                                                                  2220
tgtaagcact ataaaatctt taataagtta taaggtctat gatgtgttta ctttaaaaat
                                                                  2280
tgctgttaaa agcaacacgt attaaatatg taattatcat ctgggttaag agtctgtttt
                                                                  2340
tottottigt ggtaagtott agaatatggt actgtggatt aatctaatga aattaacata
                                                                  2400
tgtggttgaa gttaccaaga aacgatgaaa agaaactaaa tatagttgac ccttgaacaa
                                                                  2460
caggagttag gggcaccact ccccaacata gttgaaaatc catgtataac ttttgactcc
                                                                  2520.
tecaaaaett aaetaetaat ageetaetet tgatgggaag eettaeeaat aagaaaeagt
                                                                  2580
tgatgaacac atattgtgta tggtatatgt attatatact gttttcttac aatagtgtaa
                                                                  2640
gctaaggaaa agaaaatgtg tttactcttc attcagtgga agtggaccat cctaaaagtc
                                                                  2700
ttcactcatg ctatcttcat gctgagtagt aggctgagga ggaggaggag ggttggtctt
                                                                  2760
gctgttgcgg, gggtggaaga agatgtgcat tattagtggg cccacacagc tgaaaaccat
                                                                  2820
getgtteaag ggteaactgt gtgtggtate ggtgagaetg aatgattate gttggtgtte
                                                                  2880
ttaaattatt ttcaggtcct ctagaaaata tgataattat agcaaaaaat atgattgttt
                                                                  2940
tgaaattttg ataaatatat aaatgtatag aacctattgt tttcaatgat agaaaatggg
                                                                  3000
aaacattttt taacattgct agattggcag tg
                                                                  3032
```

```
<210> 3387
<211> 1217
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1210)...(0)
<223> similar to gi4886481 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3387
ttttttttt ttctaaatga agtgctttta attttcagac caaacatttt taatataaaa
                                                                       60
acattttgat aatatacaaa cagcaatcac aacagcatcc acatggcagc aaggggacca
                                                                      120
gggcacagag agggggagcg ggctggggag ggacagtttt cagggtccca gttgcttccc
                                                                      180
tggcttgaaa tcaccetggt cctagcagag gacaggttaa ggctgccaga ggcagagggt
                                                                      240
ccctgaccct ggcccggaga cagactgccc aggcaggccc tctgatacca tcttccaacc
                                                                      300
atggcagect ccaggaaaag ccagatccat ttaggagata acaggaaggt ggctgtgatt
                                                                      360
gacaggaaag gcaacatggt teeteageat eetgetgate acacetetgg gaggggetge
                                                                      420
tggattgaag aggacctaag aatcttcctg ggagcaggac agaaatggga tctaagtcta
                                                                      480
cetactaact aacatteeeg eetgtgacae cagaaagetg gagtgggtet geteagatgt
                                                                      540
acaggaagag aaaggaatga caaagcettt ggeteageag gaetggagee ttgaeaggea
                                                                      600
ctgaccaaga aagcctctag gtgggccagg gaggtctgtg ggaaagcttt ggatcaatgg
                                                                      660
tactcaaggg tgcacagtgg cacagtggcc ttagttagaa tttatgaaga cgaaaagaac
                                                                      720
acaagtcaga atttagaact gaagtacctg ettettatag geetgtagag gaaaagegag
                                                                      780
atcateette tggeeaggae taggggagae ceaaggeetg ttettteeta ggggetgagt
                                                                      840
ttgacagacc tggattgcag ctgatggctc caacagtcct ctagatgggc cctgcaggac
                                                                      900
tegetgggag geetggttge eecteecegg egtgetggga eactetgggt teetgeagtt
                                                                      960
agatgcagtc catggagttc tcagggagga ggccagggat gcagccaggg agccccaagc
                                                                     1020
ccttgatagg agtgcagttg agtgggaggc cgcagcccag ggaggggtcc tgggtctcta
                                                                     1080
tggcctccag cetgtccatg ttgttgtccc agttgatatg gaagegggte accegggggt
                                                                     1140
togaggodaa gatgttoogo tggagotggg agaaatotgg ottoatgggo gggttotoac
                                                                     1200
gcagctcagc tcgtgcc
```

```
<210> 3388
<211> 1273
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1273)...(430)
<223> similar to gi1397235 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3388
tttttttttc atagttcata gtttattaca aatgcatatt atccaactca gtagaaatcc
                                                                       60
atgtacccca gaatgtacag aaggtatgca atgttccaga gtgtcattgt cagctctggt
                                                                      120
tttatatata tattaaatat atacatattt tgagacaggg tctcgctgtc acccaggctg
                                                                     -180
gagtgcagtg gcacaatctc agetcactgc aacctetgcc teccageetc aagagatect
                                                                      240
cccacctcat ccttctgagt agctgggact acatgcgcat gccaccacac ccagctatta
                                                                      300
tttttatttc tttttgtaga gacaagggct cactatgttt ctcaggctgg tcttgaactc
                                                                      360
ctggtctcaa gtgatccttc tgccttggcc tcccaaagtg ctggaattat aggcatgagc
                                                                      420
cactgagect ggeetgatta tetgtttttt gaatagtgae cetaatgtge ttttccagtt
                                                                      480
ccagtaactt ttgataaaat ttttcagcag tgtcttcatc taggtccatc ttctgggtca
                                                                      540
taatataatt tetteeaaag eeagtggtgg eacteagata tttgateaga ggattgagag
                                                                      600
```

```
attcaggett ttggtggaaa agecataeca gagettetgt tecattatat ggtgtcaaag
                                                                660
tgaatgcatt tgcaaaaaag cgaagtagca atattgccgg catcaacagc gtccatataa
                                                                720
acggaggcag aattccatat qtcaaattqq tcaatqctgt acctggacaq qccacattqq
                                                                780
aatagagacc ctgctggttg aagttcctgt tcaaagccac actcaaaagg tcagtggcat
                                                                840
900
tagattteet tgeattgega gatgatgtee agatgagetg agatggattg teactgtgae
                                                                960
agaggagagg ctccagttcc cgaatcagga taaaatggcc aaagacattg gtctcaaaca
                                                               1020
cctcctgaag tccatcagca gtgatcttat caccctgggt cagcaggcct tcagcttgaa
                                                               1080
aagaggccaa agaaaagtgc tttgatattt agttgtggat taggcatgat cccagcattt
                                                               1140
agatatatac agtetaatet etgaaaeett tgettaagtt eettggagge eeggaagaee
                                                               1200
gactgcaggt tgctgacatc cacctggaca atggtgacct cagcagtggg gtgagaggcc
                                                               1260
agcagagcag cac
                                                               1273
```

```
<210> 3389
<211> 346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (348)...(130)
<223> similar to gi1333929 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 3389
    ggcacgagge tcctcacctt gggctggacg gggttggcac taacggggaa ctttcccag 60
    aacatggca agctccagga tggggtgat gagggaagga aggccagtga ggagaggagt 120
    gaggaagagg acagctgcga gtcaggtggt gagagcactt ggaggggctg agaggacatg 180
    ggctgggagt gaatgcatgt gcacatacac acacacacct ctccagcata tgtacacatg 240
    cacacacaca cctctccagc atatgtacac atgcacacac acacacc catatgtaca 300
    catgcacaca cacacctctc cagcatatgt acacatgcac acacac
```

```
<210> 3390
<211> 1118
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1121)
<223> similar to gi3041847 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3390 ggcacgagga caagtteege ggactggage teageagaca atgtactaga tggtgeeteg 60 ctcgtgccca agggttcatc caaagtcaag aggcgagtcc gcattcccaa caagcccaac 120 tacageetta acetetggag cateatgaag aactgeateg geegggaget etecaggate 180 cccatgccgg tgaacttcaa tgagcccctg tccatgctcc agcggctgac agaggacctg 240 gagtaccacc acctgctgga caaggcagtg cactgcacca gctcagtgga gcagatgtgc 300 etggtggccg cettetetgt gteeteetae tecaceaeag tgeacegeat egeeaageee 360 ttcaacccca tgctggggga gaccttcgag ctggaccgcc tcgacgacat gggcctgcgc 420 tecetetgtg ageaggtgag ceaceaecee eceteagetg egeactaegt gttetecaag 480 catggctgga gcctctggca ggagatcacc atctccagca agttccgggg aaaatacatc 540 tecateatge egetaggtge catecaetta gaattecagg ecagtgggaa teaetaegtg 600 tggaggaaga gcacctcaac tgttcacaac atcatcgtgg gcaagctctg ggatcgacca 660 gtcaggggac atcgagattg tgaaccataa gaccaatgac cggtgccagc tgaagttcct 720 gccctacagc tacttctcca aagagggcag cccggaaggt gacaggggtg gtgagtgaca 780 gccagggcaa ggcccattac gtgctgtccg gctcgtggga tgaacaaatg gagtgctcca 840 aggtcatgca tagcagtccc agcagcccca gctctgacgg gaagcagaag acagtgtacc 900 agaccetgte agecaagetg etgtggaaga agtaceeget geeggagaac geggagaaca 960 tgtactactt ctcagagetg gecetgacee teaacgagea egaggaggge gtagegeeaa 1020 ccgacagccg cctgcggccc gaccagcggc tgatggagaa gggccgttgg gacgaggcca 1080 ataccgagaa gcagcggctg gaggagaagc agcgcctg 1118

```
<210> 3391
<211> 1769
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (616)
<223> similar to gi4894362 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3391 °
aagcagagat cagcacttaa taggcattgc atggtccaca caggagagaa accgtacaga
                                                                       60
tgtgagcagt gtggaaaagg ctttattggt aggctagatt tttataagca tcaggtggtc
                                                                      120
cacacaggag agaaaccata taattgtaaa gaatgtggga agagcttcag atqqtcctca
                                                                      180
tgccttttga accatcagcg agtccacagt ggagaaaaaa gcttcaaatg tgaagaatgt
                                                                      240
gggaagggat tttatacaaa ttcacaactg tcttcccatc agagatccca cagtggtgaa
                                                                      300
aagccatata aatgtgagga gtgtgggaag ggctatgtta ctaagtttaa tcitgacttg
                                                                      360
caccagaggg tccacacggg agagagacct tataattgta aggaatgtgg ggaagaactt
                                                                      420
tatccgggcc tcaagtattt tgaatcataa gagactccac tgccagaaaa aaccattcaa
                                                                      480
atgtgaggac tgtggaaaga ggcttgtaca caggacatac cgtaaagacc agccgagaga
                                                                      540
ctatagtggg gaaaacccat ccaaatgtga ggattgtggg agacgctaca agaggcgctt
                                                                      600
gaatctggat atacttttat cattatttct aaatgacaca taattgttca tatttatggg
                                                                      660
gtacaacgtg ctattttaat gtgtgcatac aatttatagt gatccaatca gtgtaattgg
                                                                      720
tgtatctgtt acctcaaaca tttaccattt ctttgtgttg gaaaattcaa aatccatttg
                                                                      780
agaggagttg gtagacagca agggaagggt ccctggagac ccccagccaa aggggtcagt
                                                                      840
gtctcatccc cacataacac aaaaagcagc ctggggaaga caatcaagct acaggcactg
                                                                      900
ataagggaac tagcacaggg gattgtgcct ggagacatgc ccatgcctgc acagatagaa
                                                                      960
gaacctccag cccattcagg taaaaactcg cacaaacctc cggctcactc agttaaggga
                                                                     1020
```

```
acaagaccag acacagaaat gcctttgtcc tttgtataat cagcaggctc cgaggaaaaa
                                                                    1080
gtttcttctt ttgtgggcat gaacacagtg ggcttcagta ggttcaggtt ggcactttct
                                                                    1140
tttgtggaaa aggaaaagcc cagcctctgt aaatcatcac ttcaactcct gattggtccc
                                                                    1200
gggccaaget gaatageeet tatgaateat caetteggtt cetgattggt eeegggecaa
                                                                    1260
ggtcccagac caagetgaat cacgetttet ccaagacage cegeaggeta agtgcattee
                                                                    1320
ttccccttcc cagtccataa aaaccccgga ccccagcctc aatactgggc aacttatttg
                                                                    1380
gatccccatc tccactgtgg agagettttt tetttcactt attaaacttt tactccaatt
                                                                     1440
teaccettgt gtetgtgett ettaateata ttggaegtga gattaagaae teegggggat
                                                                    1500
acatcacaag agagactgtt acagtgtggt gcatttgtga gactacaaca catttttagc
                                                                    1560
aatttgtaaa taattgttga tgatagtcac ctttagtgct gcagaacagt agaacttatt
                                                                    1620
cttcccctct acctcttttg tatctgttgg ccaacctttg gccatctcac ctacctccta
                                                                    1680
cacttccctg cctgtctaca tccacgtgtt ctactctcta ctacaaaatc aactttttt
                                                                    1740
aacttgccct cgtgccaaga ttggcgtaa
                                                                     1769
```

```
<210> 3392
<211> 2773
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2774)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (66) ... (2332)
<223> similar to gi3880563 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3392
geggeegeaa gaaggeeaca ggeageeecg tgtecatett egtetatgat gtgaageetg
                                                                       60
gcgcggaaga gcagacccag gtggccaaag ctgccttcaa gcgcttcaaa actctacggc
                                                                      120
accecaacat cetggettae ategatggae tggagacaga aaaatgeete caegtegtga
                                                                      180
cagaggetgt gaccccgttg ggaatatacc tcaaggegag agtggagget ggtggeetga
                                                                      240
aggagetgga gateteetgg gggetacace agategtgaa ageceteage tteetggtea
                                                                      300
acgactgcag cctcatccac aacaatgtct gcatggccgc cgtgttcgtg gaccgagctg
                                                                      360
gcgagtggaa gcttgggggc ctggactaca tgtattcggc ccagggcaac ggtgggggac
                                                                      420
ctccccgcaa ggggatcccc gagcttgagc agtatgaccc cccggagttg gctgacagca
                                                                      480
gtggcagagt ggtcagagag aagcggtcag cagacatgtg gcgcttgggc tgcctcattt
                                                                      540
gggaagtett caatgggeec ctaceteggg cageageect aegeaaceet gggaagatee
                                                                      600
ccaaaacgct ggtgccccat tactgtgagc tggtgggagc aaaccccaag gtgcgtccca
                                                                      660
accoageceg ettectgeag aactgeeggg cacetggtgg etteatgage aacegetttg
                                                                      720
tagaaaccaa cctcttcctg gaggagattc agatcaaaga gccagccgag aagcaaaaat
                                                                      780
tettecagga getgageaag ageetggaeg cattecetga ggatttetgt eggeacaagg
                                                                      840
tgctgcccca gctgctgacc gccttcgagt tcggcaatgc tggggccgtt gtcctcacgc
                                                                      900
ecetetteaa ggtgggcaag tteetgageg etgaggagta teageagaag ateateeetg
                                                                      960
tggtggtcaa gatgttctca tccactgacc gggccatgcg catccgcctc ctgcagcaga
                                                                     1020
tggagcagtt catccagtac cttgacgagc caacagtcaa cacccagatc ttcccccacg
                                                                     1080
tegtacatgg ettectggae accaaecetg ceateeggga geagaeggte aagteeatge
                                                                     1140
```

```
tgctcctggc cccaaagctg aacgaggcca acctcaatgt ggagctgatg aagcactttg
                                                                     1200
cacggctaca ggccaaggat gaacagggcc ccatccgctg caacaccaca gtctgcctgg
                                                                     1260
gcaaaatcgg ctcctacctc agtgctagca ccagacacag ggtccttacc tctgccttca
                                                                     1320
gccgagccac tagggacccg tttgcaccgt cccgggttgc gggtgtcctg ggctttgctg
                                                                     1380
ccacccacaa cctctactca atgaacgact gtgcccagaa gatcctgcct gtgctctgcg
                                                                     1440
gtctcactgt agatcctgag aaatccgtgc gagaccaggc cttcaaggcc attcggagct
                                                                     1500
tcctgtccaa attggagtct gtgtcggagg acccgaccca gctggaggaa gtggagaagg
                                                                     1560
atgtccatgc agcctccagc cctggcatgg gaggagccgc agctagctgg gcaggctggg
                                                                     1620
ccgtgaccgg ggtctcctca ctcacctcca agctgatccg ttcgcaccca accactgccc
                                                                     1680
caacagaaac caacattccc caaagaccca cgcctgaagg agttcctgcc ccagccccca
                                                                     1740
cccctgttcc tgccacccct acaacctcag gccactggga gacgcaggag gaggacaagg
                                                                     1800
acacagcaga ggacagcagc actgctgaca gatgggacga cgaagactgg ggcagcctgg
                                                                     1860
agcaggaggc cgagtctgtg ctggcccagc aggacgactg gagcaccggg ggccaagtga
                                                                     1920
gccgtgctag tcaggtcagc aactccgacc acaaatcctc caaatcccca gagtccgact
                                                                     1980
ggagcagctg ggaagctgag ggctcctggg aacagggctg gcaggagcca agctcccagg
                                                                     2040
agccacctcc tgacggtaca cggctggcca gcgagtataa ctggggtggc ccagagtcca
                                                                     2100
gcgacaaggg cgaccccttc gctaccctgt ctgcacgtcc cagcacccag ccgaggccag
                                                                     2160
actcttgggg tgaggacaac tgggagggcc tcgagactga cagtcgacag gtcaaggctg
                                                                     2220
agctggcccg gaagaagcgc gaggagcggc ggcgggagat ggaggccaaa cgcgccgaga
                                                                     2280
ggaaggtggc caagggcccc atgaagctgg gagcccggaa gctggactga accgtggcgg
                                                                     2340
tggcccttcc cggctgcgga gagcccgccc cacagatgta tttattgtac aaaccatgtg
                                                                     2400
agcccggccg gcccagccag gccatctcac gtgtacataa tcagagccac aataaattct
                                                                     2460
atttcacace cettgtgeeg ggeteagtet ageceetggg aggeggetgg ggtetggege
                                                                     2520
cgccctgcgc agcccgcgcc cacgtcagac gtgaacatca atttgcttcg aaagccaagg
                                                                     2580
gtaaagaggc acgatctgat ttatcagttt ctagggaaac accetttggg agggaaggca
                                                                     2640
ggcagcgccc gccggnagga cctttacaac cggcccgcta acctggggag gggggccggt
                                                                     2700
agggcgcctc gggtctcaag gcgcctggga gggtctagcg gccctgaagg tcccttggtc
                                                                     2760
cgagccacag tcg
                                                                     2773
```

```
<210> 3393
<211> 2108
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (459)...(1694)
<223> similar to gi3043548 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3393
tttegteggt tgeactette etatageeea gagggegaga gggeetgtgg cetgggggaa
                                                                       60
ggaggacgag gttctgcctg gatcccagca gtaggacgct gtgccatttg ggaacaaagg
                                                                      120
aatagtetge etggaatece tgeagatett ggggeeggag geeagteeaa eeettggage
                                                                      180
aggaagaaac gcaaagttgt caagaaccaa gtcgagctgc ctcagagccg gcccgcagta
                                                                      240
gctgcagact ccgcccgcga cgtgtgcgcg cttctctggg ccagagcgag cctgttttgt
                                                                      300
gctcgggtta agagatttgt cccagctata ccatgggccg cactcgggaa gctggctgcg
                                                                      360
tggccgctgg tgtggttatc ggggctggtg cctgctactg tgtatacaga ctggcttggg
                                                                      420
gaagagacga gaacgagaaa atctgggacg aagacgagga gtctacggac acctcagaga
                                                                      480
ttggggttga gactgtgaaa ggagctaaaa ctaacgctgg ggcagggtct ggggccaaac
                                                                      540
```

```
ttcagggtga ttcagaggtc aagcctgagg tgagtttggg actcgaggat tgtccgggtg
                                                                      600
taaaagagaa ggcccattca ggatcccaca gcggaggtgg tctagaggcc aaggccaagg
                                                                      660
cccttttcaa cacgctgaag gaacaggcaa gtgcaaaggc aggcaaaggg gctagggtgg
                                                                      720
gtaccatete tgggaacagg accettgeac cgagtttace etgeccagga ggcaggggtg
                                                                      780
gaggetgeca ecceaceagg agtggateta gggeeggggg eagggeaagt ggaaaateea
                                                                      840
agggaaaggc ccgaagtaag agcaccaggg ctccagctac aacatggcct gtccggagag
                                                                      900
gcaagttcaa ctttccttat aaaattgatg atattctgag tgctcccgac ctccaaaagg
                                                                      960
tcctcaacat cctggagcga acaaatgatc cttttattca agaagtagcc ttggtcactc
                                                                     1020
tgggtaacaa tgcagcatat tcatttaacc agaatgccat acgtgaattg ggtggtgtcc
                                                                     1080
caattattgc aaaactgata aaaacaaaag accccataat tagggaaaag acttacaatg
                                                                     1140
cccttaataa cttgagtgtg aacgcagaaa atcagggcaa gattaagacg tacatcagtc
                                                                     1200
aagtgtgtga tgacaccatg gtctgtcgct tggactcagc tgtgcagatg gctgggctaa
                                                                     1260
gactgttaac caacatgact gtgactaatc attaccaaca tttgctttcc tattcttttc
                                                                     1320
cagacttttt tgctttgtta ttcctgggaa atcacttcac caagatacag attatgaaac
                                                                     1380
taattataaa ctttactgaa aatccagcca tgacaagaga gctggtcagt tgtaaagtac
                                                                     1440
catcagaatt gatttccctc tttaataaag aatgggatag agagattctt cttaatatcc
                                                                     1500
ttaccetatt tgagaatata aatgacaaca taaaaaatga agggetegea teatecagga
                                                                     1560
aagaattcag cagaagttca cttttttct tattcaaaga gtctggagtt tgtgttaaga
                                                                     1620
aaatcaaagc actagcaaat cacaatgatc tggtggtgaa agtaaaagtc ctgaaagtat
                                                                     1680
taaccaaact ctaatttgga gtctgtccca aacaatattg agatatttgc agttggtacg
                                                                     1740
atgtgatttg taaattettt gttttteatt gtgegtatat ggtaaagaga tetttteage
                                                                     1800
tgctattttg gaataatgac tatcatatat cataacagtg actgatgttg gttgtaatgg
                                                                     1860
ttgggtttag ggatgaccca ttttaaggat gcccaaatga aatattagga tttgggaccc
                                                                     1920
agaaagaatt tattgatttg atcttattac ctagattgag attttttaat ctttcctcta
                                                                     1980
cctaaactga caatgaattg gttatacatc atgcataagc taccctttta tattagttta
                                                                     2040
tatttgttat titaaaactt gtgtttcatc aataaagttg tgttttaagc agcagaaaaa
                                                                     2100
aaaaaaa
                                                                     2108
```

```
<210> 3394
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1134)...(427)
<223> similar to gi3882211 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3394
ttttttaaac tagtacacac ttaggtgcaa acctcggttt attacgttct ttggttaaat
                                                                      60
attgtttcta catcctttca gagcattagg agaacaaaga taatatttga tagaaagact
                                                                      120
gaaaacacaa teetttgett tteagagaaa agactgaatt tacactggta etgttagaaa
                                                                      180
ttcttataat taggctagac gtctatttta gagaaagtta gggcttttgc tgttgcttgt
                                                                      240
atgttttgaa aaatacattc ccctggggct agccaacatc actgtcctga gacccagacc
                                                                      300
ttcagggagt ctcttgataa aggctgctcc gcacatgggt caggaaaagt cggggtcagc
                                                                      360
tecateatgt eegaggactg catgggttea gtgttgeeca teactgegge aacggettet
                                                                      420
geceaecate tetttetgga atacagacag attttgggtg aaacetgtet etgttettga
                                                                      480
eggacaggtt etgetecaet cettecatta ggtttetgaa geaetgggea aggaceteet
                                                                      540
gcttggggag gggctggctg tttatcaaac ttgctctcag ttcactgaaa tacttctcat
                                                                      600
```

```
tgagcaggat gagccccagg agaggcctgg atactgacca ctggttccga cagtcttcaa
                                                                      660
agacaatggt gttcatgagg acagacatca tctgctgcag gacatctggg ttttgctgca
                                                                      720
taaaatgtaa tagtetetga eeageetggg tageetetet geeategaag tggeettett
                                                                      780
gcccctcttt tgctatgtgc ttgaagaggt aggtgacgat gtagtctaaa ctggtacagc
                                                                      840
agctggagga gacaactgta tcaagagtag tgagtccctc tgagatagat gtgagaacat
                                                                      900
acatgagtac aggaggetet aagttgatga tgaageteat atggteetga gtgagaeatt
                                                                      960
ccaggagtgg ataataagac tggctcagtt tccggtattg tagcaagtca ctgtgggaca
                                                                     1020
ctgacagcag cattttgaca aaagcctgga gtacattgtc aaaatggttg tccccataca
                                                                     1080
acttgaagac gccaaagctg acataatttc cacacaaggc agacttgagc tcgtgcc
                                                                     1137
```

```
<210> 3395
<211> 2457
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (51)...(1573)

<223> similar to gi530823 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3395
ageggeegea gaccetgaag ggacaceagg agaagatteg geageggeag tecateetge
                                                                       60
ctcctcccca gggcccggcg cccatcccct tccagcaccg cggcggggat tccccggagg
                                                                      120
ccaagaatcg cgtgggcccg caggtgccac tcagcgagcc aggtttccgc cgtcgggagt
                                                                      180
cgcaggagga gccgcgggcc gtgctggctc agaagataga gaaggagacg caaatcctca
                                                                      240
actgegeect ggacgacate gagtggtttg tggeeegget geagaaggea geegaggett
                                                                      300
tcaagcagct gaaccagcgg aaaaagggga agaagaaggg caagaaggcg ccagcagagg
                                                                      360
gegteeteae actgegggea eggeeeeeee tetgagggeg agtteatega etgetteeag
                                                                      420
aaaatcaagc tggcgattaa cttgctggca aagctgcaga agcacatcca gaaccccagc
                                                                      480
gccgcggagc tcgtgcactt cctcttcggg cctctggacc tgatcgtcaa cacctgcagt
                                                                      540
ggcccagaca tegeaegete egteteetge ecaetgetet eeegagatge egtggaette
                                                                     600
etgegeggee acetggteee taaggagatg tegetgtggg agteactggg agagagetgg
                                                                      660
atgcggcccc gttccgagtg gccgcgggag ccacaggtgc ccctctacgt gcccaagttc
                                                                      720
cacagegget gggageetee tgtggatgtg etgeaggagg eeeeetggga ggtggagggg
                                                                      780
ctggcgtctg cccccatcga ggaggtgagt ccagtgagcc gacagtccat aagaaactcc
                                                                      840
cagaagcaca gccccacttc agagcccacc cccccggggg atgccctacc accagtcagc
                                                                      900
tececacata eteacagggg etaceageca acaceageca tggecaagta egteaagate
                                                                      960
ctgtatgact tcacagcccg aaatgccaac gagctatcgg tgctcaagga tgaggtccta
                                                                     1020
gaggtgctgg aggacggccg gcagtggtgg aagctgcgca gccgcagcgg ccaggcgggg
                                                                     1080
tacgtgccct gcaacatcct aggcgaggcg cgaccggagg acgccggcgc cccgttcgag
                                                                     1140
caggccggtc agaagtactg gggccccgcc agcccgaccc acaagctacc cccaagcttc
                                                                     1200
ccggggaaca aagacgagct catgcagcac atggacgagg tcaacgacga gctcatccgg
                                                                     1260
aaaatcagca acatcagggc gcagccacag aggcacttcc gcgtggagcg cagccagccc
                                                                     1320
gtgagccage egeteaceta egagtegggt eeggacgagg teegegeetg getggaagee
                                                                     1380
aaggeettea geeegeggat egtggagaae etgggeatee tgaeegggee geagetette
                                                                     1440
teceteaaca aggaggaget gaagaaagtg tgeggegagg agggegteeg egtgtacage
                                                                     1500
cageteacea tgeagaagge etteetggag aageageaaa gtgggtegga getggaagaa
                                                                     1560
ctcatgaaca agtttcattc catgaatcag aggaggggg aggacagcta ggcccagctg
                                                                     1620
cettgggetg gggeetgegg aggggaagee cacceacaat geatggagta ttattttat
                                                                     1680
```

```
atgtgtatgt attttgtatc aaggacacgg agggggtgtg gtgctggcta gaggtccctg
                                                                     1740
cccctgtctg gaggcacaac gcccatcctt aggccaaaca gtacccaagg cctcagccca
                                                                     1800
caccaagact aatctcagcc aaacctgctg cttggtggtg ccagccctt gtccaccttc
                                                                     1860
tettgaggee acagaactee etggggetgg ggeetettte tetggeetee eetgtgeace
                                                                     1920
tggggggtcc tggcccctgt gatgctcccc catccccacc cacttctaca tccatccaca
                                                                     1980
ecceagggtg agetggaget ceaggetgge caggetgaae etegeaeaea egeagagtte
                                                                     2040
tgctccctga ggggggcccg ggaggggctc cagcaggagg ccgtgggtgc cattcggggg
                                                                     2100
aaagtggggg aacgacacac acttcacctg caagggccga caacgcaggg gacaccgtgc
                                                                     2160
cggcttcaga cactcccagc gcccactctt acaggcccag gactggagct ttctctggcc
                                                                     2220
aagtttcagg ccaatgatcc ccgcatggtg ttgggggtgc tggtgtgtct tggtgcctgg
                                                                     2280
acttgagtct caccctacag atgagaggtg gctgaggcac cagggctaag caattaaacc
                                                                     2340
agttaagtct caaaaaaaaa aaaaaggggg ggccgtttta aagaaccctt gggggggccc
                                                                     2400
aagttaacgc gggctggcaa ggtaaaagtt ttttccttat agggagccgt ataaaac
                                                                     2457
```

```
<210> 3396
<211> 3398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3399)...(700)
<223> similar to gi2252820 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3396
ttttttttt tcaggttcaa aaacagtttg aggtttttta ttatccaagt ccctttgaaa
                                                                       60
agataattaa ttgtacaagt gtcatcgcat gaaaaacaga ctcgggcagc ccctgctggc
                                                                      120
cctagcctga gaaatgtaca tatttacacg ggccctcaga aaggaggacc caggactgca
                                                                      180
cagccggcgg ctggaaggca ggtgcagtgt tccgtcgccg attcacacag tggcaggcaa
                                                                      240
gtgacaagct gttttgaagg cactcggtgg cgcggacaat tgacagaggc ccttcaggcc
                                                                      300
tetgeattee gggeetggge ccaagecaga cetggggtae gtgggeaaat cccagaggga
                                                                      360
aagtagatcc cagcacacgt gcccaaggga ggtgccgggg gatggggggg gggtcacctg
                                                                      420
aagctggcag cagggacctc ggctgcccca cttgggctgg gccctccaag tattgctatg
                                                                      480
aggagtggtc caggctgcct ccttgggggc aggacagaag cttgtggacc acttggaggg
                                                                      540
accccctacc tgcctctaga cacgggtaga ccacagggat gggtggtaca cccaacactg
                                                                      600
ttccccatcg ggctcctgag tacgaggtca tctgcctggc cgtgacaccc gtgcccgcca
                                                                      660
agggeetege etggeacage ggeeageeca ceageetate agtecacett etecaetttg
                                                                      720
ccgatgatet tetecteaaa gacgggeagg acggeetegt cetetegaac etecteaaac
                                                                      780
accaccccac agtcaaactc gtcgctcact ttcttgaagt agtatctgta gctgcccttt
                                                                      840
ttggtcagca gctccttgaa ctggcccagg gtgacagcgc ggcccctcac cagggtgcgg
                                                                      900
taggggatgg gttccccgca gaagtagtac gccacaacga tgctgtcaca cggctgggca
                                                                      960
ctecegeege ecacetteet etgegatett gtetetgtet eggagagete catgteegae
                                                                     1020
acggctggta ccacgtgcag caccggcgcg cacgctggcc tgacgcaggc gcgtccccgc
                                                                     1080
cgcataacct cctgcacata cctctgcttg gagggtgctc ggctggctct cttttcttcc
                                                                     1140
tectecagae gteggegege etectecage tgggttaggg ggttgggage tgggtggggt
                                                                     1200
ggcatggtgg ggtcttggat gaagaggtgg gagggctgca cggaggtccg gagctgaggg
                                                                     1260
ccggcccagg ggtgctcaag ggacaagggt ctggagttct catggggctg tggcttcctc
                                                                     1320
gtccccgaag acccgtggcc ggtcctgcgg tgcctgctga tctccttttc cccctcaatg
                                                                     1380
atocactgca tgattttctg gttcttctcc gcatcctccg aggcacctgg cacctcggtg
                                                                     1440
```

```
ctggcgctct tccccgactc agccttcttg gcatttcttt tgcacgccac gcccaccttc
                                                                      1500
 ccactgtggg cgaggccatc actggcgttg ggggcagcgc caacactete tgagtagcet
                                                                      1560
 cgggaccttg ccccatggct gtgtggttcc aggccccagg cgaagctgct ctgggccctg
                                                                      1620
 cgggtggcct cggcctccac ctgctccttg ggccgggctg tgctgtggtg gacgtgqtqq
                                                                      1680
 tggacgtgtc ggtggtggtg caggccggcc gcgtccagct tcgcccctga cttgggtacg
                                                                      1740
 tgcttcccgt gccccgaggc ggcacccccc agtgccactg gcatcttggc cacgtgccca
                                                                      1800
 ctgtccgggg agcgatggcc aggcccaggc gactggcggc caggtgtcct cagcacacgc
                                                                     1860
 tgtacgtgct cgtccaggat gctctcaggg ttctcctcgt gtgcatcccg gagcccggca
                                                                      1920
 cageceatgt ceacacageg gggegggaag tggtgeeaag egggggeggg aggeagettg
                                                                     1980
 tgacacggcc ctgggggccc tgacgatgga tcgccgtcct caccttcctc ctccatqcqc
                                                                     2040
 acgegettea geogeteete cagettetee teggeeteee gegtgegetg cacageetee
                                                                     2100
 aggeggtgga tgageteete egegaaettt tgaggeteea egeggaeete etteggeaee
                                                                     2160
 cggtacgtgc ggggaatgtg aggtaggggc acccgcccat tgacctgcac gctctcctqc
                                                                     2220
 atctccctgc ggtgctgctt acggatcctg tatgggggga tcccatccac gctgctgtcc
                                                                     2280
 gtgagggaca gggtgtctgc atcgctggac aggctctgct gctcgctgtc gttggcactg
                                                                     2340
gtggctgggg ccagggcata gccggcattg acataatagg ggttgactgg ctcccgccag
                                                                     2400
gatecatace tgaactetet geettegetg tacegtetae tggaggagae ceteggggea
                                                                     2460
gctgtctcca ggagcagctt ctgagggagt cttccggggg gagcagcgtc tctgccatcg
                                                                     2520
tectegteea tgteetggte acaetteeat tecteatett catttaaggt eggeaggtat
                                                                     2580
ccagatatge cettecetgt ceetgaceea gagetetggt caetacagae tttggggete
                                                                     2640
 tccgagcctg tcctcgtata ttccaaataa atatcagact taaggaagga gggataggtg
                                                                     2700
ttttcctcca tagtggcctg gatttcggtc tgggcctggt caaacatggc aggatcgatc
                                                                     2760
agctgcttca tgatgcagcc ctttatgaag ctcttggtgg ctggcttggt ctgccgggac
                                                                     2820
acgatgccat tgttatcaag aatgtacttt cggtagatgg ctctcgccag cttcagcctc
                                                                     2880
tteteetegt tegagteaca gggeteeage tteetgaage cagtgeagge aaaccagaag
                                                                     2940
tecageaagt eggeacagee etectgette aggaaagtee tgaacagget tateceatet
                                                                     3000
tggtcatcca gcagggaatg cagtgactca gcccacttca agtatggtgg ggtgggggag
                                                                     3060
gcactgccct caggetcata ecccaggtee agateegage gceteggagt ggeegtegaa
                                                                     3120
gtctcacctt taatgccaac acctttcccg gagcagaaac tgtagctggc gggcctcggg
                                                                     3180
tetgtggaca ccagttetee etecteacea ggeactgggg gteggggage atetteggtg
                                                                     3240
aaacttgctc cgaggtccaa ggggaaaccc tgctcttgga tattcatttt gggactctgc
                                                                     3300
gtcaaggaac aatgagcgct gcaccctaat acatcagtac ttacagctcc aaagtgaatc
                                                                     3360
aatctgtccc gcgcgcggtg gtggcgggac cccgggcc
                                                                     3398
```

```
<210> 3397
<211> 1372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1373)...(13)
<223> similar to gi3341990 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3397
ttttttttt ttctgtctgg actttatagg cattaaaggc ttgcttttt tcacttaact 60
ttgccaaagc actgtatcgt ggatcattaa taatcatttt catagcctgc tcccatgaag 120
cattcgatgg tacccgcttt tctttcaata attctttaaa agcttgcttt gcctcttcct 180
ttgtattcca agtgtatgtt ttctttgctg gttggctctc ctcctcttt tttttgggag 240
```

```
taaaatcagc tacagtttet tgettagatg tttettetee agtattaetg gataetteea
                                                                      300
cactttgatc ctgaatagca ggggtactag taagttgtgc ttgttcctca gttgaaatag
                                                                      360
ttactgtatt ctcattatct acaacagtag caacaatgga agtaacttca ggctcaggaa
                                                                      420
caactggaaa cagttccact gacagtatta gaagcagaag tggaagcatt agcattggct
                                                                      480
gcagctgctg ctcgtgctgc cgctgctgct gctgcaacaa cagcagctgc tgcttcggcc
                                                                      540
agcagccatg gtgctcattg tggtcggaat ttctgttgta gggactgggg ctgttgatgt
                                                                      600
tgtggtgcac tettettget tactgettte tteagetttg ateattgeat geagggttga
                                                                      660
atttggtata aagacttcca gcaacaatgg tattctggta tccttcaaga tcctcaagtt
                                                                      720
ctttaggttt ggcccagcga gattcttttg tttgagaatt ataatagtaa ggctttccag
                                                                      780
aatctgattt gtattccttc caggggcatt tagataagag ttgctcagca ggtgttttaa
                                                                      840
gatcatctgg tttctcccag gtagactgtt tggtttcagt gttgtagtag taagtccttc
                                                                      900
catcaggtga tttatgttca gtccacattg attttgcacc agatgctgta cctgctgcta
                                                                      960
catccatact atttactcct ggcggtaagg caggctgcat ggaagcctga gacatatgag
                                                                     1020
acatcatcat tecaggeatt actgacgaea teattecagg catttgteec attggtggee
                                                                     1080
ctcccatagg gggcatcatc tgcggcatca ttccatgagg tacaggaggc atattcgctc
                                                                     1140
tetgacecat agggtgeatt eccattgggg cataatgeat gecagggtge eccategagg
                                                                     1200
gccgtctcct caggaagccg tcagcagaga cccaagagcc ggagcagagg cttgagccgg
                                                                     1260
acaatctccg ctccccgtcc ccaggaccct gcgagggagg atggctctcc atttcactca
                                                                     1320
ccatgaggcc tccacgctca gctcccgtcc ccggcctcat cgtcgggctc ag
                                                                     1372
```

```
<210> 3398
<211> 6305
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6306)...(269)
<223> similar to gi1504030 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3398
aaatttaacc ttgccaaccc cggggtatat aaacttgatc cttttaaacc ggcccccct
                                                                       60
ttttttttt ttgtttttt aaaaagtatt tatttttac tagtgaggat ggaactaggg
                                                                      120
gaagaagttt acagaaaga tgtccatata caaagaaaga aatagcaaaa tatttttggt
                                                                      180
cataatttag aaagaaacta atctataaaa tggagacaat tctccccaat tcatctctct
                                                                      240
catagaagag cataagcacg ggctctcagt tccttgatat cctcaagagg ccacggatac
                                                                      300
gtctgacaag agcctgtatg aaactatatc gagatcgaac ttttgaatat aatccttcaa
                                                                      360
tgtccagaag tttcttttgt agtgattctc caaaagcgtt gattgcatca gcctgaagct
                                                                      420
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```

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                                                                     1320
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                                                                     1380
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                                                                     1440
ggaggagaat ctggcggtag cgatccactg gggtagggat gaacattgga gggtctctca
                                                                     1500
tgccaaacat gctctgcggg tccgtttctg ggcgcatgtc atagacttgg cattgagcta
                                                                     1560
gtctcacaat cacccctgat cttagcagct ctaatgcacc ctgctgtatc tttgccactc
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gccat
                                                                     6305
```

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<210> 3399
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2291)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2284)...(430)
<223> similar to gi29865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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                                                                    180
attaaanaaa acaattcaac ttttaaaaagg gattacccat atgcaagaag aaggtattgc
                                                                    240
tatcacccat tetaaattee cecaatgeat teattteetg tteeettate ttteaactet
                                                                    300
agtggcaaag taaagactga attgaaatta agctggcact acaacatcat taccagggat
                                                                    360
agacacataa acaaagtcat ttccaaataa ggaatgctgg atctccagag aagtgacaaa
                                                                    420
gaggagtcta ctgagttttg cactcaggca catccttgcc tgaggaggcg tgcccaagga
                                                                    480
cctggctgag aatccacact ctctgctcct gcattttgca cctctggaca aaggcctaaa
                                                                    540
cttgagttat caaaatagcg aactggatga ggtgatggta aagactttga tcggctatca
                                                                    600
aaaaaacaag attttggtga ttcctttggc acaggatctt gtaaattccg ttccttgcat
                                                                    660
tgagagggtg taatttgttt ctttttagaa gctgttccag tcactttagg agactttgga
                                                                    720
gaattctcac aagttacttg tttgtgagcc tctcttttaa gggttctttc cttccaagtt
                                                                    780
ttgacctcat tggaaagatg ctgattattg cttaacaatt cattcttttq ttttattagc
                                                                    840
tgttcatttt gctgctttaa cttagaaatt tctttttcta gccttatatg ttcacttttc
                                                                    900
aaaataagag cttttgtgtt ttgtacaatg ccgctgccac ctccacaagt taagggttta
                                                                    960
tttgaagget gaggateagt atgttetgat ateaetgagg tatettggge etgttgaett
                                                                   1020
cttctgagat tttctctcaa tagccttata acttcctttt gatattctac agtggctttt
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gtagcactga tttccttttc aaattctttg gcatttttca ttttctctag gtctattttc
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ccaagettea tittgagate ticaatitet tetttatatg gettagetee taaageaact
                                                                   1200
ttgtcctgaa gtacttgaat tgtctctttt gttttttcaa ggcatttatt tgattcatga
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actitggett gaagttitge tattatgica tragicacet caagttetti etgeatetti
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ataatcttgc tttccttatg catagcactt tctttagctt catgcagtga attttccagc
                                                                   1380
tctcgaattt tctctgtggt taactgtgta gctcttgatg taacatgagg attcttattg
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tcttgtgtgg taggattaac ctgggcacca gatgccaagg aagtcttcaa tgtttggtag
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tttttaaata gtttttcatt tttctctttc agtgatttca ggtcctgttc ccactctttg
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gatatggtag cacttettte etcaaactet gttgatteat teattatgge aattattetg
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ttattaaaga agttattcac ttgacaaatc ctatcatttt ctttctggat gccattttta
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agetttteta tateaaaacg agtatttaac cactetteca aaaactgtgt catttette
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ctattactta gtacttgttg aaattcagtc tttatgctag ggaactcact ttctqaqaaa
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                                                                   1920
tgcttttcca cttcatcaat aaaatccatt tcaaatttat tgatggattc atgttgttct
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tottttattt ttgtaacata gottaacaca tacttcagtt tottcatgat totgtggaat
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tccatggagc atctctggtt tgcagtaaaa agtttttcaa tgtgtttggt ttgtaaatag
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ggaagtgaga ggtttgcttt aacteteatt gaaagetett tttggaatte aattteefte
                                                                   2160
tecaagteaa gagacaatet atteaageae teataatgat eateeatete tgagtatete
                                                                   2220
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                                                                   2280
cgaattccqc
                                                                   2290
```

```
<210> 3400
<211> 5221
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5222)...(2576)
<223> similar to gi3043712 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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```
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tatatttggc atttttatta tctttcatat tgatcgtgag cattatgggc tcacagactc
                                                                     4440
tttgtttaaa tttgtctctg ttatttctta gccataaaac agcatcatac gtgtcacgga
                                                                     4500
atctctgtct tagcttatct tccttctgat tcataagatt gtcaaaacgt acaatatgat
                                                                     4560
cgtccacact cttttctcc ttctctagag tttccctctc tcttcgctta tcaattattt
                                                                     4620
cgccttcaca taatgccttt tcatcctgaa tccgtctcag atcatttgta atggcatcaa
                                                                     4680
totggggctg aagattotog cagttttoog tggtotttag ttoattttgc aaatcotota
                                                                     4740
teattttgeg ggtattaeet atteteetet gteggteaag etetteattt tgetttaeta
                                                                     4800
ttaaagcctg ctgaagttcc tcaatatgtt tatctttcct ttctataaca tcttgcttct
                                                                     4860
gtttgcattt ttgagatgcc tccttaatat ctgttgcctt ttctttgatt cgagcctcca
                                                                     4920
aattgtgacg ctcgttttcc atttcttcaa ttcgacatgt tataggaatc tgcccttctt
                                                                    4980
taagttttct gacctcttcc ttcactcggt cacgaactag ttttacttct tcatattcct
                                                                    5040
gacgaacatt ttcatattcc acccatggcc tttttgcttc aagcatctca attaaatcta
                                                                    5100
aatgtcgctt ccgttcatag aacctctcca catcttgttt atatctttca ttcctctgaa
                                                                    5160
ccattttctg tagatactca gttttctctt tgcatgaggt ctcgagctgt ttttcttct
                                                                    5220
                                                                    5221
```

```
<210> 3401
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (253)...(11)
<223> similar to gi4567174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3401

ctcgaggcct agtcgagcag ggatggctcg gctgggcgga taatggtggg ccggctgggc 60

gcagcagggg gtcttctggg cactcctggg ggaatccctg gggggatccg aactggccga 120

gatgggatct gaggcgggc tgggaagagg tcactgttgg caaacacgct ctggggtcca 180

ggcacgggat gggattgtgg gcgcccaaa agaggctttt gtcgccacgc tgacaagaat 240

ctgggggggc cccaagacgg cccaagatct ctttggtgct gtactagcaa aaatctacta 300
```

```
<210> 3402
<211> 3542
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3543)...(1622)
<223> similar to gi1469888 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3402 cgatataaag gccatcttat ttcttctccc actttttgtg ggtgacttct tggtatccgg 60 ggcttttcag tgacagccgg ggcgacaggc caggctgagc ctgtggctcc agggtccaaa 120 gagaaaggag ggcagaaata agagaagatg gcctttattg cagcacgaac ttgaggggga 180 ctgcatgtcc cacagctctc cagggagctg ccaaaggcaa cgggcccgcc ctgccctgc 240 aacaggeeet eeaggggett agageatgge teeeetcagg aagggtaaeg egtgettgta 300 aacaagggcc cagacaacac agagaggaga ggcagcatca tcatgtgcag ctttgctaca 360 agaaagatag ttettaattt caaagaggag acacegetae acetageeet geeeteeeat 420 gcactggaag gctctggaag tagctctcgc ctgcctgggc agttaggtcc acccactgcc 480 cgtgagctgg gcccaggcac actgcagcca cacaaaaacg ctggcagctg actcctaatt 540 tcagaaacac aattagaaaa gaactggaat tttacatttt tctcccatac attaaaaaat 600 aagaaaaagc caacattttg actgtagacc ctggtaggtg gcatctgact ttaacctgaa 660 gttctcattg gaatcetttt ctgtctggcg ctccaccgcc cacaatcagc cccagcccca 720 ggatcetteg geaaggggeg cetggggetg gggeteattg gaatcetttt etgtetggeg 780 etccacegee cacaateage eccageecea ggegeecett geegaaggat eetggeecat 840 ctcacacaag ggcgggaccc cgtggagtgc ccggcgagca gggcaaccac tgggaagaca 900 gatactgatt tecetgttgg ggtetgtgae eetcageaaa egaaaaggaa aeggtaacaa 960 gacggtggcc tcctgccagg acctcagcag gaggtttgct ggtgaaggtt ctgggtgagc 1020 tggaatgggt gataaggcgg gcttgctggg tggtggcctc aggctgttcc tgggcccctg 1080 tcgcatagag ccctgtgggt gcagtgtggg gccccacagc cgtcccgggg tcgtcctgat 1140 gcataagagc agagaccccg gaagagaaac ccgcctgccc cgtgtgatac agggctccca 1200 aacgetteec ggtggaacee tgeteecgag gacacettgt etegeteeac ggaaceette 1260 ccccagcace ecetggaaac acagcageca ggaacaaatt etecatgeca ggaacgaage 1320 ccttggctaa actggagact catcagtgca cagatggtgg tgaggggtga gggcagggcg 1380 tggggtggtg ctcagccctg gggacaccat cactgtcctg ctctgaccca caggtgagag 1440 gaggatgetg tgetecegga gtgtggegee gggaggatgg eteggeagga cagaggeetg 1500 gggctgaggc tatgcccagg gccggtgtgg ggagggacat gggggccttt gcagaagcag 1560 ctcagagaac tgaggttgga atcctgcccc aagcacaggt tttggggaca gcgagtgcct 1620 agacaaggca ggtaacgtgg cagccaccgg gctggtccag aaacaaggtg ctgaagacgt 1680 cgttgaagaa ggtggggtgg tacctgcagg ctcgctcaca gtcggggttg aagttcacct 1740 ccaggatetg eggetgeate accegeette catetgggee gttgteecae tteageatga 1800 ggtcgacggc atacatggcc cgggatgagg ggtagtcgca gaggcccagg ggtggtggct 1860 tggcacaggc cacctggaac agctccgtga aggcccggaa gatctcagcc tggacgtccg 1920 tecagggaaa ttetgggtat tgetteteaa aeteggggat gaactettea cagtgeacet 1980 getteageae cacateeggg teatagttea tgacegtgaa agtgettete gtaagteate 2040 ccaggtcgtt gagtgcaaaa ggcccggttg gagaaccgca agcccagaac acatcataca 2100 cgaacaaccg taggggcctc actgaccgca gcagcacgat gtagcggatg tcgaacttga 2160

```
cettteceae gtettetega aggaacaaca egggaettte gatgtaettg gacacaacet
                                                                     2220
tgggggtget eteteggtge eggatgatge tgtgeagget ettggtgaeg tgggtgteea
                                                                     2280
ggctgcgcgc caggttccag ggcttgcaga tccagtggtt gtcctcgccc cacctttccc
                                                                     2340
gctgctggaa gtagctgaca aactggggca gctcagtgcg caggttgaag gttcggggca
                                                                     2400
gccagggtgg gccctcgggg ccacctgccc gggcgcgcga tggaggccag gcagtccttg
                                                                     2460
acagtcagca ggttctcgca ggggaactgg ttcagcagca cgcctggcct ctcctggctg
                                                                     2520
agtttcctgt agtccttgaa gtgtgagaag ttgaagagga tgtcggcgtc cgcctcactc
                                                                     2580
tgggtgaggg tgaagcgcgg gtgggtgagg ctgctggcca cctgctgcac gtccgtgtag
                                                                     2640
accttgaaga tgtggccgtg ggggtgcacc acggggttga tgtcaagtgg cagcttctcc
                                                                     2700
ttgttttcct ccagaatggc ctggtagtgc tcggcgggcg gctcgggtgt gcaagagctg
                                                                     2760
aggtccagca tgtcggtggg ggcccagggc agcagcatgc acttccggat cagggggtcc
                                                                     2820
gteteteegt aggeaaagte tegggteace teetegeeag tgteeaggte ceteagggge
                                                                     2880
cacagcagcg tgtaggccac ctgctgcggc atgtagaaga agggtgccgt ggcgaagctg
                                                                     2940
ggcacgtccg cgtgctggat ccgcgaaccg aactcgtcca tgatatacca caccggcatc
                                                                     3000 -
ttctcctcag ctgtcccatg ggccagctgg taggtctggt tgaacttcca catctcctcc
                                                                     3060
agcaccaggg ccacageete tgtactggge ageteacegt ggaacteaat geccateagg
                                                                     3120
ttggccatge ggtgcagcag cccgggcace tgetgcaget getggcgcge gtgetecaca
                                                                     3180
cggcacgtcc aggcgtggtc gatgaggaag atgctgttgg ggtgggctgc ctggagcccg
                                                                     3240
ctctccctgg tcacgatgac cttgtagcac agctcgttcc ccgggttggg ctgctgcttc
                                                                     3300
egeacetece gggetgeete gteeteetee tettetaeet cetecaettg catgatecea
                                                                     3360
aacacttccc cagcgtcgaa aacctcgtgc tccagcttgt gcaggaggcg gccccagtaa
                                                                     3420
cgttcgggga cccccgaagc gcgcagcgcc gggccgtgca gcgccgcgaa ctcggccaag
                                                                     3480
geetgegege ceteeteegg egtetgeee gggetgetae geteegeagg eeggegeteg
                                                                     3540
                                                                     3542
```

```
<210> 3403
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1751)
<223> n = a,t,c or-g

<220>
<221> misc_feature
<222> (1752)...(1407)
<223> similar to gi3925215 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3403
aaagatcgaa ccccaattct attctattct gacataatgc tcataatgct cctaaaggaa
                                                                       60
aaaagtaaaa ttgtttattt tootoocaag caaaacaaaa tgaacaagtt caatcaaaaa
                                                                      120
catcccaatg gaaaaaaatc acactaagaa taaaacactt acagaacggc aagaaaactg
                                                                      180
ggttaacata taaatttgtg tctgttgaaa ccagagtaca tgctagaaaa cattaacaca
                                                                      240
gatacgacag agtgtggttt ttttttagaa atgggtaatt tctctctcca gtatcctttc
                                                                      300
acttgtatga gatatttctc ctctcctgtt ttcacaaacc aagaaatccc caggtaggcc
                                                                      360
aatcccagag gtgccattta gcagtatgca gcagcccagt ttcagcataa caaaacatgc
                                                                      420
cttggtagtg gctctctcat gcaaataaaa gaaagcttaa gaaattcttg ttgtaggtgg
                                                                      480
```

```
attaggcaag gctgccattc agctggtata agctaaaagt aaaaaatcaa aacgctcaag
                                                                   540
aaaacggaca caattttgga atgattaaag atgtctttat aaagtttttt tcaagacttc
                                                                   600
attctaaata cacagaataa aaaatggtgt cagctcactt gtaagacacc aaccagattt
                                                                   660
tccttatact gtctcaaaat ttaaagatca atttccccag agggtgtgca atqcatcata
                                                                   720
aaatggccct tttttgagga tgggagagga agggttgggc aggatggaat attaaattgt
                                                                   780
aacatgataa acatgcaaga ctgttatcca atctagataa tttatataca ttttgatgac
                                                                   840
ttaggaaaac aaagcaatca tttgtgacaa gcctaaaaaag cttgacatat ttaacatact
                                                                   900
taggaacttt ttttgtgcgg tgggaattct ctaattgtat catgtgggcc ttttgaaagt
                                                                   960
aacaaacaga aggccagtct gttgcaagtt tgctgctgaa catcacattc caccctaaga
                                                                  1020
1080
tgtcagtgca aagtatggac taaactgctt tcaggaaaaa agttgtaaaa attgatacag
                                                                  1140
gttggaaaag ggaattttcc ttcccggctt ggagtcctcc caatttaagg cagaacccat
                                                                  1200
ccactccaat ttctgcagtt taaaactttc tctacttatt tagttttctc ctctgagttc
                                                                  1260
aaccgctgct ggattcgttt ggcataactt tgtgccatgg agttaatgat agataggatg
                                                                  1320
aagtaacaca ccatgacaac gaccaacttt tcaaacatcc aggacaacca gttttctccc
                                                                  1380
tgtggtgtgc ccatttcgct tttgtggtga agcttctgcc gttgagcctc caggtactcc
                                                                  1440
tgaaatggct tctgcagaga tggacctatg ccggggacag caccaatgaa agccaccatt
                                                                  1500
tgctccacta tgtgcttgct gaatgttatt ataacaaaaa ttttctggat atgcattttt
                                                                  1560
attattgctt ttccaattag gttgcaccaa gaggtccaac caatcaacaa ncaagngttt
                                                                  1620
tgaccccatg aaatgtgtcc acacgttatt ccagccagat caaataaagg atttggcaat
                                                                  1680
tgaagcacag gccaaaattc caaaaaatcc aactttctgt actagttttt gaactgccag
                                                                  1740
tttggcccgg
                                                                  1750
```

```
<210> 3404
<211> 2487

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2488)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2488)...(186)
<223> similar to gi36122 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3404
tttttttttt ttactatcta caaaaattta ttatatattt acagaagaaa agcatgcata
                                                                       60
tcattaaaca aataaaatac tttttatcac aacacagtac atatttgtca tttttaaaaa
                                                                      120
gccacacaat agaaacaaga caccaagata tttaattatc ttgttgactc ctgtaaaata
                                                                      180
gctaaacact catcattcgc ggtgcaatac tcatagacat aagttcctga aacaatagtt
                                                                      240
tgcatgcgta aggcattcgc accaaagaaa tctgggtttt attgcggcag cccctgcatt
                                                                      300
catatgtatg ggtcctggtg ttggcaatcg ccattattcc acaaagattg caaacatgaa
                                                                      360
cctgatatgg atctgatgcc tcaaacaatc tttcccttaa aaactgggct gctccatggg
                                                                      420
caatctgaca atctcgttcc atttctccaa aacgcaggcc accatcacga gatctaccct
                                                                      480
ccatgggctg tctattgagg atctgaatag gtcccctagc acgagagtga atcttatcat
                                                                      540
ccaccatatg cttcaaacgc tggtaataag tggggccaat aaatatttgt gatgtgattt
                                                                      600
```

```
ttcgaccagt gaacccattg tacaggacct catttcctct gagatgatag ccataatcag
                                                                       660
 ataaaagatt agaaatette tgeaegttaa eageateatt aaatggagtg geateaceaa
                                                                       720
 tttcaccctt gttagccgat accttccctt gaaggcattc aattaagtga ccaatagtca
                                                                       780
 tacgagaggg gatggcatgg ggattgatga tgatatcagg ggtgatacct tcacaggtga
                                                                       840
 aaggcatate etettgteta taetgaatae cacaagtace ettttggace atgtegaact
                                                                       900
 agcaaattgt ctcccaatct gtgggaaccc ctaacagagc gtacccctta ttttaacaaa
                                                                       960
 atttaatate cettecetgg attgaagagt tacceataae etgateecae aatgeeegte
                                                                      1020
 tcactagttc ctgagaaaag tgctacagtc tcttcttggt atagcggtct attggtgctc
                                                                      1080
 teccaaatte atetteattt tecaggeaag gtgaetgttt tgeetataat aacateatet
                                                                      1140
 cctgatacca cgaacccct gggagctatc aaaaccnatc atcatccagc ttgtcgtaaa
                                                                      1200
 tggcatgcgc gtcntgccct ggcatggttc acgtgtaggc ttctcaaaaa cttcttcttg
                                                                      1260
atcaaatcct tttttagact cctgttcttt gtatgagcga tagaaaacag acctgaagaa
                                                                      1320
gccgcggtcc tacagctgaa cgattcatga taacagagtc ttccctgatt atatcccagt
                                                                      1380
gtatgatgca atggccacaa ttgagttgat gcctgctggc agctctctaa atcgtagata
                                                                      1440
ttccatagac cgtgtagtca caagtggctt ttgaggataa tagagaacat gggccaatgt
                                                                      1500
gtccatgcga acatggaagt tggtgatgta aactcccata gcctgcttac ccatagcaga
                                                                      1560
ctggtatgtg tttctagggg actggttatg atcaggaaag ggaataatag atgcacagac
                                                                      1620
accaaggate attgagggat gaateteaca gtgtgtatat gtggaacaat aagetaette
                                                                      1680
tttctcctgt aaatcatctg gagtcattgc aagcatcact gtttcttctt ccagggtatc
                                                                      1740
aatatactcc actaccccac tggccacaag atcctgccaa ctatagttgt tatattctct
                                                                      1800
ctettteaat tggteaatat geetettett caaaagtage ttttgttttt ceacaateag
                                                                      1860
aagtggtcta caaatacggc ctgcatccgt atagatccga atctccctct ctcgaatatc
                                                                      1920
tctgatcata gaaacttcag acacaatgat gtccatctga cgtctcaatt tccttagggt
                                                                      1980
gttcataagt tgttcgggat ctttatgtat tccaacccag cagccattaa caaaaatctt
                                                                     2040
ggttgcatca gcaatagctg caggagaaat ttcttctaaa ttttccatac tccattcttc
                                                                     2100
taaaaaattcc agaattggag atggttgaga tccaactgaa atatacgcca tcaaggctaa
                                                                     2160
attetteaca agreetacag carggeerte tggggrereg geaggacaea ceatteecea
                                                                     2220
caacgtatta tgcaactgtc ttggttttgc tagettgccg tctctaccaa taggagaatt
                                                                     2280
taaacgacgc aggtgagaaa gagtagacgc aaaagtcagg cggtttaaca cctgagatac
                                                                     2340
tocagetetg gettgatgag etttettttg atcaceccag tttecagtag etaaagagta
                                                                     2400
ttttaggcca tcagatatga tccgtgtttt aattgccaac tccaagttaa aatcctttcc
                                                                     2460
togatcaata aatttctgtg catagat
                                                                     2487
```

```
<211> 1333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(960)

<223> similar to gi2506078 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<210> 3405

```
<400> 3405
aagcttggca cgagggtctt gtcagcagcc cggccattgg agcatatctt tctgccagtt 60
acggagacag cctcgttgtg ctggtggcca cagtggtggc tcttctggac atctgcttca 120
tcttagtggc tgttccagaa tctctgcctg agaaaatgag accggtttcc tggggagctc 180
agatttcttg gaaacaagca gacccttttg cgtcgttgaa gaaagttgga aaagattcta 240
ctgtcttact aaatctgcat caccgtgtgt ctttcatacc ttcctgaagc tgggacagta 300
```

```
ttcaagtttt ttttctctat ctcagggcag gtcatagggt ttgggatctg ttaaaattgc
                                                                      360
agcattcata gctatggtag gaattctgtc tattgtggct cagacggcct ttcttagcat
                                                                      420
cttgatgaga tcattaggaa ataagaatac tgtcctcctt ggcttgggct tccagatgct
                                                                      480
ccagttagcc tggtacggtt ttggatcaca ggcctggatg atgtgggcag cagggaccgt
                                                                      540
ggctgccatg tccagcatca cgtttccggc aatcagtgcc ctcgtctctc ggaatgcaga
                                                                      600
gtcagatcag caaggagttg cccaggggat cataactgga ataagaggac tatgcaatgg
                                                                      660
cctggggcca gcactgtatg gcttcatatt ctacatgttc catgtggaac tgactgagtt
                                                                      720
gggcccgaaa ttgaattcta acaacgttcc cctgcaggga gctgtcatcc caggcccgcc
                                                                      780
gtttttattt ggggcatgta tagtccttat gtcttttctg gctgccttat tcattcctga
                                                                      840
atacagtaaa gccagtggag ttcaaaaaca cagtaacagc agcagcggca gcctgaccaa
                                                                      900
caccccagaa cggggcagtg atgaggacat tgagccacta ctgcaagaca gcagcatctg
                                                                      960
ggagetetet teatttgagg ageetgggaa teagtgeaet gagetgtaaa eteggeagaa
                                                                     1020
agtgggattc tgcatacgcc atctctgaga gccatggagg gagccacacc cctggtgact
                                                                     1080
tcatggtgct ggatgggaga cgctagcggc atccttcagg gccaagtttg ataaatacca
                                                                     1140
ecgccatcat tetgeteate etecteetgt tttttttttt etettacatt etttttttt
                                                                     1200
teceggitaa teettaaaac cagaaaaaaa tiggaaaaac tiettigeaa aaagggggea
                                                                     1260
actcccaggg ggaacctcaa ataaaaaaag cattcttttg tgaaaaaagg agggcttcct
                                                                     1320
tgaaaggaca aaa
                                                                     1333
```

```
<210> 3406
<211> 2127
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(1455)
<223> similar to gi5006265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3406
tgctcattgg ggcccaggtg ctcctgggca tcggtgctac ccctgtgcag cccctgggcg
                                                                       60
tetectacat egacgaceae gtgeggagga aggaeteete getetatata ggaateetgt
                                                                      120
teacgatget ggtatttgga ceageetgeg ggtttateet gggetettte tgtaceaaa
                                                                      180
tctacgtgga tgcggtcttc attgacacaa gtaacctgga catcactccg gacgaccccc
                                                                      240
gctggatcgg agcctggtgg ggtggctttc tgctctgcgg tgccttactc ttcttctctt
                                                                      300
ccctcttgat gtttgggttt ccacagtccc tgcccccgca ctcagacccc gccatggaaa
                                                                      360
gegageagge catgetetee gaaagagaat acgagagace caageccage aacgqqqtee
                                                                      420
tgaggcaccc cctggagcca gacagcagtg cctcctgttt ccagcagctg agagtgatcc
                                                                      480
egaaggteac caageacetg eteteaaace etgtgtteac etgeateate etggeegeet
                                                                      540
gcatggagat tgcagtggtg gctggcttcg ctgccttttt ggggaagtac ctggagcagc
                                                                      600
agtttaacct caccacctct tctgccaacc agctgcttgg gatgactgcg atcccgtgtg
                                                                      660
ettgtetggg tatetteetg ggaggtettt tggtgaagaa geteageetg tetgeeetgg
                                                                      720
gggccatteg gatggccatg ctcgtcaacc tggtgtccac tgcttgctac gtctccttcc
                                                                      780
tetteetggg etgegaeact ggeeetgtgg etggggttae tgtteeetat ggaaacagea
                                                                      840
cagcacctgg ctcagccctg gacccctact cgccctgcaa taataactgt gaatqccaaa
                                                                      900
eegatteett cactecagtg tgtggggcag atggcatcac ctacctqtct geetqetttq
                                                                      960
etggetgeaa cageacgaat etcacggget gtgegtgeet caccacegte eetgetgaga
                                                                     1020
acgcaaccgt ggttcctgga aaatgcccca gtcctgggtg ccaagaggcc ttcctcactt
                                                                     1080
tectetgtgt gatgtgtate tgcageetga teggtgeeat ggcacagaea ceetcagtea
                                                                     1140
```

```
teatecteat caggacagte agecetquae teaagtetta egetttggga qttettttte
                                                                     1200
tecteetteg titigitigge titeatecete caccecteat citicgggget ggeategact
                                                                     1260
ccacctgcct gttctggagc acgttctgtg gggagcaagg cgcctgcgtc ctctacgaca
                                                                     1320
atgtggtcta ccgatacctg tatgtcagca tcgccatcgc gctcaaatcc ttcgccttca
                                                                     1380
teetgtacae caccaegtgg cagtgeetga ggaaaaaeta taaaegetae atcaaaaaee
                                                                     1440
acgagggcgg gctgagcacc agcacagagt accaagacat tgagactgag aaaacctgcc
                                                                     1500
CCGaatcaca ttcaccttca gaagactcct ttgtgagaag ctgagggcct ggccctcttc
                                                                     1560
ctcttcctgg agagaacagc cctccaccac ccacagacct cgcgggcctc acttagcgtg
                                                                     1620
etectecty tecgagaace egagggteee catgtggatt atceagecag tgtgtggtee
                                                                     1680
tttgaggccc caagcgcagg cctgtgatga ggaccaaaga ggtgacttat ggtcaggagt
                                                                     1740
actecaaaca geteteagag taggeatett teetgggtet etaaagagte atgetgaeet
                                                                     1800
ggtgtgcaaa ttcccttcca cccatccctc tacctcctct ggggatggct tgccqacatq
                                                                     1860
ctttagaaac tcccctcttg ggaatgctcc tctgactgag ggctccaaca gctttaatga
                                                                     1920
aatcagccga gagggtaaaa accaacctgt tgcattgaat ggagggggga aaaagcacat
                                                                     1980
actcaataga tttttgagtg tggtactctg tatttttgca gcgtttattt tccaaatgag
                                                                     2040
cagtttagaa atatgtgatg taaagtacat actgtacgtt tgctgaaaat tatattaaaa
                                                                     2100
gcactatttt aattcttaaa aaaaaaa
                                                                     2127
```

```
<210> 3407
<211> 1859
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1860)...(794)
<223> similar to gi5262712 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3407
aagteteatg gtgattgate ttegtetgeg tggggtgtat ggttgttaat etttetetet
                                                                       60
ggcagttagg gcacacaga attectagea tececaetee agegaaacae ttgtgcacag
                                                                      120
attacaaaca ccaatatgat tttattcaaa cacaggcaag aacaatgacc ttcagagctg
                                                                      180
ggtaaaaata ataagttaaa agcatggtta gaattttaga caatcagata aaaaqtttqa
                                                                      240
aggaagtgat ttccccttcc tctcctaatt gattaattca acacagcata aaaataattt
                                                                      300
gtatctataa aatatccttg ttcccacaca aatgaactgg aggtggccct aggatttcct
                                                                      360,
tgactatggc acaatgcaca caatctacat gtccctcctc cccaactttt aaggcaaaaa
                                                                      420
tggtcctgca tcttcagggc agagggtggg ctcatgccag cagtcagctg tgtcaaggac
                                                                      480
actggggggc gtttctccac cgaaagatgc ctgcttgggt cccacttggg cgcggattcc
                                                                      540
attttatttc tagcctttgc ctcaccacag aaaaaaggag ctgaaattct ggcaagtgga
                                                                      600
cactggactg gtttggggca ctcctccagt ctgggctgac cgggtctctt gaggcatccg
                                                                      660
tggcctaggc aagtggtggt ttcaggactg tgacagccct gaaggagcca gacctggtgc
                                                                      720
ctcctgcaag ctggacaaag ctgacggagg gtgggcaggt gtctccttcc ccccagcccc
                                                                      780
tcaggctgcg tcagtctttc tgggagtact gagaagaaaa tatccgtgca atcctgagag
                                                                      840
tttcttcctc aggcaggttg agggggagcg agttaggtct ggggcgacaa ggcctttggg
                                                                      900
agagagetee eetggtgget tegetettgt eetgatetgt tgtggetget ggtggeaaag
                                                                      960
ttgctgagag tgaaagcatc cgcagggaag cctccaactg ctggggaggc aaaaaaaagt
                                                                     1020
tgggcaccac aatgggccct gggagcagga ggctctgctt tgtggacgtc tctgatccag
                                                                     1080
ttgtcacctg cctctgcctg atgtcagagg agtcgatggg tggtccctta tggttttccc
                                                                     1140
ttctgctctg ggaggctaga tttagcggca acttcttgaa gctatcagca gagtcaccga
                                                                     1200
```

```
gctcactggt ggcagettca ttetcagetg gggeetetga ettgggetee ttgttetgat
                                                                     1260
ctgtctgtgg tgagctccat ccaacaaacg tgctgctctg ttgagctcct gagagtgttg
                                                                     1320
ggcatgggat gggctgaggg ttggctgagg cagactcgcc accaaccctg gccttagagg
                                                                     1380
cctcacactc acaagcaaca agactttggc taggagaacc ctgcctaggc aggtgggggt
                                                                     1440
tgacagecet ttetgggetg gagagaaage taettttgae cataagetee tetetgeaga
                                                                    1500
aaggccctgg agaaggacaa gaggggcctt ccctctgcac ctcgtcaggc tgagggctga
                                                                    1560
tgacctcact tgtgtctgat atgacactag accaagggct agttttgtct gtcaccgtgg
                                                                     1620
tgatctcatt taaggtcctg ggctcaatga tgtcttcttc atagtcctca tcactgtagg
                                                                    1680
ctggcgcctg cctcagtgtc ttcactgctc tgcatccttg taatgggtac tgcatgcctc
                                                                     1740
agggactcat ggagcattct tcctccattt gaagtctctt cgagaggagg gggtgatggg
                                                                     1800
gaatctgtgc ctttatctgg agctcttacc aatggctcat ctggcattgt gcatcgttc
                                                                     1859
```

```
<210> 3408
<211> 2578
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1951)
<223> similar to gi3334741 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 3408
atggcggcag gcctggccac gtggctgcct tttgctcggg cagcagcagt gggctggctg
                                                                       60
cccctggccc agcaacccct gcccccggca ccgggggtga aggcatctcg aggagatgag
                                                                      120
gttctggtgg tgaacgtgag cggacggcgc tttgagactt ggaagaatac gctggaccgc
                                                                      180
tacccagaca cettgetggg cageteggag aaggaattet tetaegatge tgaeteagge
                                                                      240
gagtacttct tcgatcgcga ccctgacatg ttccgccatg tgctgaactt ctaccgaacg
                                                                      300
gggcggctgc attgcccacg gcaggagtgc atccaggcct tcgacgaaga gctggctttc
                                                                      360
tacggcctgg ttcccgagct agtcggtgac tgctgccttg aagagtatcg ggaccgaaag
                                                                      420
aaggagaatg ccgagcgcct ggcagaggat gaggaggcag agcaggccgg ggacggccca
                                                                      480
geeetgeeag caggeagete eetgeggeag eggetetgge gggeettega gaatecaea
                                                                      540
acgagcaccg cagccctcgt tttctactat gtgaccggct tcttcatcgc cgtgtcggtc
                                                                      600
atcgccaatg tggtggagac catcccatgc cgcggctctg cacgcaggtc ctcaagggag
                                                                      660
cagecetgtg gegaacgett eccaeaggee tttteetgea tggacaeage etgtgtacte
                                                                      720
atattcacag gtgaatacct cctgcggctg tttgccgccc ccagccgttg ccgcttcctg
                                                                      780
eggagtgtea tgageeteat egaegtggtg gecateetge cetactacat tgggettttg
                                                                      840
gtgcccaaga acgacgatgt ctctggcgcc tttgtcaccc tgcgtgtgtt ccgggtgttt
                                                                      900
cgcatcttca agttctccag gcactcacag ggcttgagga ttctgggcta cacactcaag
                                                                      960
agetgtgeet etgagetggg ettteteete tttteeetaa ecatggeeat cateatettt
                                                                     1020
gccactgtca tgttttatgc tgagaagggc acaaacaaga ccaactttac aagcatccct
                                                                     1080
geggeettet ggtataceat tgteaceatg accaegettg getacggaga catggtgeee
                                                                     1140
agcaccattg ctggcaagat tttcgggtcc atctgctcac tcagtggcgt cttggtcatt
                                                                     1200
gecetgeetg tgecagteat tgtgtecaac tttageegea tetaceacea gaaceagegg
                                                                     1260
gctgacaagc gccgagcaca gcagaaggtg cgcttggcaa ggatccgatt ggcaaagagt
                                                                     1320
ggtaccacca atgccttcct gcagtacaag cagaatgggg gccttgagga cagcggcagt
                                                                     1380
ggcgaggaac aggctgtttg tgtcaggaac cgttctgcct ttgaacagca acatcaccac
                                                                     1440
ttgctgcact gtctagagaa gacaacgtgc catgagttca cagatgagct caccttcagt
                                                                     1500
gaagccctgg gagccgtctc gccgggtggc cgcaccagcc gtagcacctc tgtgtcttcc
                                                                     1560
```

```
cagecagtgg gacceggaag cetgetgtet tettgetgee etegeaggge caagegeege
                                                                     1620
gccatccgcc ttgccaactc cactgcctca gtcagccgtg gcaggcatgc aggagctgga
                                                                     1680
catgetggca gggettgege aggagecatg eccetteaga geegeteeag cetteaatge
                                                                     1740
caagececat gacageettg acetgaactg egacageggg ggaettegtg getgecatta
                                                                     1800
teageatece tacceetect gecaacacee cagatgagag ceaacettee teecetggeg
                                                                     1860
geggtggcag ggccggcagc accetcagga actecagect gggtaccect tgeetettee
                                                                     1920
eegagaetgt caagatetea teeetgtgag gggtaggeet getgatteag agggteetet
                                                                     1980
tcatttttgg gaactccttt ccaaagccat atttttggga ggcagagagg ggcaggcttg
                                                                     2040
ggcacccctt ctgcccccc cactgagaac tatgcaatgg agtttcatga aatggtccac
                                                                     2100
atagtgggga agtagccagg aaatgagaaa cttcctccca ccccagacat ttttcctggt
                                                                     2160
gggagetgaa geactggget tecacaggee eetggeetee ttgeeetage acactgggae
                                                                     2220
tggccccact ctcccagetg gactcetgea tgctcctccc cttgggctct cagatgaagg
                                                                     2280
caaagetttg atccgacate tgagetetag ectaagaagg agagttgaga ttteeteete
                                                                     2340
cctctggctg ggatatggag ctttggaggt tcagagaaga gaaccctcac ctctgatctg
                                                                     2400
gcctctacga gaggtcctca tctccatctg gcccaacaat tcccagattc tgaagcttgg
                                                                     2460
gaatgcaaac acaggettea tggggetgtg geettetgge aggegaeetg ecateeceag
                                                                     2520
ggccttgcct gagggggttc aggcttgcct tttcccaaca cacactcaga taggcaca
                                                                     2578
```

```
<210> 3409
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1298)...(766)
<223> similar to gi424102 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3409
gcatgtggtc tgtgtgtggg gtggagggct gggggtgttg gcaagtctca caggtgagga
                                                                       60
cccaacgagg gaatcagaca aaaagtggcc acaaattagg cagctccagg aaggacatgt
                                                                      120
ccttgccata gtaagatgtt ctgctcacgc gtatccacga gaaagccccg catttcacgg
                                                                      180
ggagcataga aacaggagtc cccaactctg ctcaccagct cctccggctg ctgccatctg
                                                                      240
ctcctgcagc atggcggcct gggaagcctg cactggtgat tttctgccac tcaagttttg
                                                                      300
cagacttegg gaagatggat geatageetg gggeaatgae agteacagge eegeettgte
                                                                      360
acaaggteee tggageggge aatgeettga geecaaagge tgggageaca aagceatett
                                                                      420
cagccatcct cgatttccag caagacccca gggctcaccc aacagcccga cactccatac
                                                                      480
tacaaggtgg gttaattttt taaaagactc tgcagaaata taccaactac agagctcagg
                                                                      540
aaagcaactg atttataaaa cccaatccaa gttgtttgct tttatagcat tagagacatg
                                                                      600
tctgaagaac ttcaagtttt tatctataga aacataatta gtttaataaa ttactaggtc
                                                                      660
tattttgaat atctaaattg agtactttta ttagacctaa gtggaacttt atctgaatct
                                                                      720
gaattttcca aggggccagt gtagagtgac acaggtgtcc gaggccacct ttccatcttc
                                                                      780
agacaccccc ccgtctctct gcacagggag ttggccttcc agtaggtgtt gctcttctgt
                                                                      840
cttgacgtct cctggaaaga tttttatctc tattttcctg tggtggggtt ttccacgagc
                                                                      900
taattettte tatttttaaa eteattgget ttggaggage tgaattgtta gatgaegate
                                                                      960
tttgtcccca ggaagagtgg ccactctgga ttcttgtggc cagcgtattt gggtattgtc
                                                                     1020
tetteateag etgacagagg tgaaattttt eeaaaageag gtteeaatge eagagtgtge
                                                                     1080
gattettgcc ccgcgtgtgg ggacgctgca gatttettec tggctttcca ccgctgcagc
                                                                     1140
tgcagageté teagettite teggagetee atgttetget eceteaaage atetatatga
                                                                     1200
```

```
ctccggagtt ttccatgaac atcagcccac agagacttct gtctcccaag ctcttggtgg 1260 agtctgatga tctgctgctg taatggctgg tccccaacag tcactactgc caggatcaga 1320 tcatctgggc catgtccca cagttgtccc caagccctcc tgcctcatat ccctcgtgcc 1380
```

<210> 3410
<211> 715
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(625)
<223> similar to gi4314286 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 3410 gcacgagegg ecgeteacge tgcattaceg ecagaatggt geccagaagt cetgggaett 60 catgaagacg catgacagcg tgaccgttct cttattcaac tcttctcgga ggagcctggt 120 gttggtgaag cagttccggc cagctgtgta tgcgggtgag gtggagcgcc gcttcccagg 180 gtecetagea getgtagace aggaegggee tegggageta cagecageee tgeeeggete 240 agcgggggtg acagttgagc tgtgtgccgg cctcgtggac cagcctgggc tctcqctqqa 300 ggaagtgget tgeaaggagg ettgggagga gtgtggetae caettggeee eetetgatet 360 gcgccgggtc gccacatact ggtctggagt gggactgact ggctccagac agaccatgtt. 420 ctacacagag gtgacagatg cccagcgtag cggtccaggt gggggcctgg tggaggaggg 480 tgageteatt gaggtggtge acctgecect ggaaggegee caggeetttg cagaegaeee 540 ggacatecce aagaceeteg gegteatett tggtgtetea tggtteetea gecaggtgge 600 ecceaacet ggateteeag tggagaetee agggttetag acagaggeea gtettggeea 660 ctcaccccac accccgcgga ccccaataaa ggcttgcata gctccaaaaa aaaaa 715

<210> 3411
<211> 6388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5874)
<223> similar to gi5689555 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3411
cttcccctg ttaccatgtc agggaaatat ataatggaag aacatgatag ttattcggat 60
caggtgtgga gtatagatga actgcttct aaacaaggtt actatttaca gggaaattat 120

```
ctgcgttgtg tggcagaagt tggttccttt gaacataatc ttacaactga tcttctaaac
                                                                      180
cacttggtat ttgtacagaa agtgttcatg aaggaagtta atgaagtaat acaaaaagtt
                                                                      240
totggtgggg agcagcotat tootototgg aacgaacatg atggaacagc agatggagat
                                                                      300
aaacctaaaa ttctcctcta ttccctaaac ttgcagttca agggtattca agtaacggcc
                                                                      360
actactecat caatgagage tgtaagattt gaaactggat tgattgaact ggaactttet
                                                                      420
aaccgactto aaaccaaago ttoaccagga agtagcagot atotgaaact gtttggcaaa
                                                                      480
tgccaggtgg atttaaatct ggcattagga caaattgtca aacatcaggt ttatgaggaa
                                                                      540
gctggttctg attttcatca agttgcctat tttaaaacca gaattggatt aagaaatgcc
                                                                      600
ctccgagaag aaatcagtgg ttcttcagat agggaagctg tgcttattac tttgaataga
                                                                      660
ccaattgttt atgcacagcc tgtggccttt gatagagctg tgctgttttg gctgaattat
                                                                      720
aagggccgcc tatgacaact ggaatgaaca acgaatggct ttacataagg atattcatat
                                                                      780
ggctacaaag gaagtagtag atatgctacc tggtatccag caaacatcag cccaggcctt
                                                                      840
tgggactect tttetecage teactgteaa tgatetggga atttgeetae etateacaaa
                                                                      900
tactgcacag tctaatcata ctggagacct tgacactggt tctgctttgg tattaaccat
                                                                      960
tgaaagtact ctcatcactg catgetette agagtetetg gttagcaaag ggcatttcaa
                                                                     1020
aaacttttgt atccgttttg ctgatggatt tgagacatca tgggatgact ggaaaccaga
                                                                     1080
aattcatggg gatttagtga tgaatgcctg tgtagttcca gatggcacct atgaagtatg
                                                                     1140
ttcaagaact acaggacaag cagcagctga aagcagtagt gctggaacct ggacactcaa
                                                                     1200
cgtattgtgg aaaatgtgtg ggattgatgt tcacatggat cctaacattg gcaaaaggct
                                                                     1260
taatgetetg ggcaataete ttacaacaet gacaggagag gaagacatag atgacattge
                                                                     1320
tgacttaaat tcagtgaaca tagctgacct gtcagatgag gatgaagttg atactatgtc
                                                                     1380
teccactate catactgaag ccacagatta tegaagacag gcagcatetg etagecagee
                                                                     1440
gggagaactt agaggaagaa aaattatgaa gcgtatagtg gatatcagag aactgaatga
                                                                     1500
acaggccaaa gtaatagatg atctgaaaaa attaggtgca agtgaaggaa ccataaacca
                                                                     1560
ggaaattcaa cgttaccaac agttagaatc tgtggctgtg aatgacatta gaagagatgt
                                                                     1620
tcgtaaaaaa ttacggaggt ccagtatgcg ggctgcttcc ctaaaggata agtggggttt
                                                                     1680
gagttacaaa ccaagttaca gccgatcaaa aagcatttct gcttctggaa gaccacctct
                                                                     1740
taagcgaatg gaaagggcaa gttctcgagt aggagaaact gaagagctcc cagaaatccg
                                                                     1800
tgtggatgca gcatctcctg gacctagagt aacttttaat atccaggata catttccaga
                                                                     1860
ggagacagaa ctggaccttt tgtcagtaac cattgaaggt ccatcccatt attcatcaaa
                                                                     1920
tagtgaagga tcatgttctg tgttcagttc tcccaaaact ccaggaggct tttcaccagg
                                                                     1980
cattcctttc caaactgaag agggccgacg ggatgacagt ttgtcttcta ccagtgaaga
                                                                     2040
ttccgagaag gatgaaaaag atgaagacca tgagagggaa aggttttata tttacaggaa
                                                                     2100
acceteaeat aegtetegta aaaaageaae aggetttget getgtteate agetatttae
                                                                     2160
agaacgctgg ccaacaacac cagtcaatag aagtcttagt ggcacagcta cagagagaaa
                                                                     2220
tattgacttt gaacttgata tacgggttga aattgatagt ggaaaatgtg tactccaccc
                                                                     2280
aaccaccctt ctacaagaac atgatgatat aagtttgaga aggagttatg atcgaagttc
                                                                     2340
caggagetta gateaagatt cacetteaaa aaagaagaag ttteaaaeta attatgette
                                                                     2400
taccacccat ttaatgaccg gcaagaaagt gccatcatct ctacagacaa agcctagtga
                                                                     2460
cttagaaaca acagtatttt acattcccgg agttgatgta aagttgcatt acaattccaa
                                                                     2520
gacgctaaag actgaatcac ctaatgcctc caggggatct tccttgccaa gaacactgtc
                                                                     2580
caaagagtcc aagctgtatg gtatgaaaga tagtgcaaca tctcctcctt ctcctcttt
                                                                     2640
accttccact gtccagagca agactaacac cttacttcct ccccagcccc cacctattcc
                                                                     2700·
tgcagccaaa ggaaaaggaa gtggaggagt aaaaacagcc aagttatatg cctgggtagc
                                                                     2760
acttcagtca ttgccagaag aaatggttat tagtccctgc ctattagact ttctggaaaa
                                                                     2820
agetetggaa aetateeeaa ttacaceagt tgaaaggaat tatacagetg teageteaca
                                                                     2880
agatgaagat atgggacatt ttgaaatacc agatcctatg gaagaatcaa caacatcact
                                                                     2940
agtgtcgtct tcaacatctg cttactcttc cttccctgta gatgttgtgg tttatgtacg
                                                                     3000
agttcagccc tcacagatca aatttagctg tttaccagta tcaagagtag aatgcatgtt
                                                                     3060
aaagctgcca tccctggatt tggtgttttc ttcaaaccga ggagaactgg agactttagg
                                                                     3120
gactacatat cctgcagaga ctttatcccc tggaggtaat gctactcaga gtggaacaaa
                                                                     3180
gacttctgct agcaaaactg gaataccagg ttcatcggga ttaggcagcc ctcttggccg
                                                                     3240
aagtcgacat agtagtagtc agtcagacct gaccagttcc agcagtagtt catctggctt
                                                                     3300
gagetteact geatgeatgt etgaetttte eetttatgta ttteateeat atggageagg
                                                                     3360
gaaacaaata actgctgttt ctggcctcac acctggatca ggaggattag ggaatgtgga
                                                                     3420
tgaggagccc acttcagtca ctggtcgaaa agattcactc agtataaacc ttgagtttgt
                                                                     3480
aaaagtgagt ttgtcacgga tcaggcgttc aggaggtgcc tcattttttg aaagtcagtc
                                                                     3540
```

```
tgtaagcaag tetgeaagca aaatggatae taegttaata aatatatetg etgtttgtga
                                                                     3600
tatagggtet geeteettta aatatgatat gegeegaete agtgaaatte tggeatttee
                                                                     3660
aagagcatgg tatagaagaa gtattgcaag acgtctattc cttggagacc aaactataaa
                                                                     3720
tttgccaaca tctggcccag ggacacctga ttccattgaa ggggtaagcc aacacctttc
                                                                     3780
ccctgaatca tcaagaaaag cttactgcaa gacctgggag cagccaagtc agtcagcctc
                                                                     3840
cttcacccac atgcctcagt cacctaatgt gttcaatgag catatgacaa acagcaccat
                                                                     3900
gtcaccaggg acagtaggac agagcctaaa atccccagct tccataagat caaggagtgt
                                                                     3960
atctgattct tcagttcctc gaagagattc actttcaaaa acatcaactc cttttaacaa
                                                                     4020
atcaaacaaa gcagcaagcc aacaagggac cccatgggaa acacttgtcg tgtttgctat
                                                                     4080
caacttgaag caattaaacg ttcaaatgaa tatgagtaat gtaatgggaa atacaacttg
                                                                     4140
gacaactagt ggtttgaaga gccagggccg tctgtcagta ggaagtaatc gtgatcgaga
                                                                     4200
gatcagcatg tctgttggtc tgggaagatc acaattagat tctaaaggag gagtagttgg
                                                                     4260
agggaccata gatgtcaatg ctttggagat ggttgctcat atttctgaac atccaaatca
                                                                     4320
gcaacccagt cacaaaattc agattactat gggttctact gaagctcgtg ttgattacat
                                                                     4380
gggctcaagt atcctcatgg gcatcttcag taatgctgat cttaagcttc aggatgaatg
                                                                     4440
gaaagtaaac ttgtataata cattggattc aagcataact gataaaagtg agattttcgt
                                                                     4500
ccatggagat ttgaagtggg atattttcca agtaatgata tcaaggtcaa ccacaccaga
                                                                     4560
tctgataaaa ataggaatga agctccagga atttttcaca caacaatttg ataccagcaa
                                                                     4620
acgagetetg tetacetggg gaccagttee ttacetteeg ecaaagacaa tgactageaa
                                                                     4680
cctagaaaaa agttcacaag aacaattact tgatgcagca catcatcgac actggcctgg
                                                                     4740
agtattgaag gtggtatcag gatgccacat atccttattt cagattccat taccagaaga
                                                                     4800
tggaatgcaa tttggaggat caatgagctt acatggaaat catatgacac tggcatgttt
                                                                     4860
tcatggtcca aattttcgtt caaaatcttg ggcccttttt catttagaag aaccaaatat
                                                                     4920
tgctttttgg actgaagete agaaaatetg ggaagatgge tecagtgate attetacata
                                                                     4980
tattgtacaa acactagatt ttcacctggg tcataatact atggttacca aaccatgtgg
                                                                     5040
tgctttggaa agtcctatgg caacaataac caagataaca aggcgtcgcc atgaaaatcc
                                                                     5100
accccatgga gtagcaagtg tgaaagaatg gttcaattat gttacagcta caaggaatga
agagctaaat ctgcttcgta atgttgatgc taacaacact gagaatagca ctactgtgaa
                                                                     5220
gaattetagt tigitgagig gatteagagg aggitetage tacaaccatg aaacagagae
                                                                     5280
tatctttgca ttaccaagga tgcagcttga ctttaaatcc attcatgttc aaqaaccaca
                                                                     5340
ggagcettea ttacaggatg ccageetgaa gecaaaagta gaatgtagtg tggtgacaga
                                                                     5400
gttcactgac cacatttgtg tgactatgga tgctgagctc atcatgtttc ttcatgattt
                                                                     5460
agtatcaget tatettaaag aaaaagaaaa agecatettt ecaeetegga ttttatetae
                                                                     5520
tcgaccagga caaaaaagtc caattattat acatgacgac aattcctctg ataaagatag
                                                                     5580
agaagatagc atcacttata ctactgtgga ctggagagat tttatgtgca atacatggca
                                                                     5640
tctagaacct actcttagat taatttcttg gactggaaga aagattgatc cagtaggtgt
                                                                     5700
tgattatatt cttcaaaaat tgggctttca tcatgctagg actactattc ctaaatggct
                                                                     5760
tcaaagagga gtcatggatc cactggacaa ggttctgtca gttcttatca aaaagctcgg
                                                                     5820
tactgcacta caggatgaaa aggaaaagaa aggcaaagac aaagaagaac actaaaaaag
                                                                     5880
taatttgatc tgtgaacaaa ttatgattgt gtctgtttta ttacactgga gtgtttttt
                                                                     5940
agtataataa tttgaaatat aactttaaaa taattctaaa tttgtggcta taattaaaag
                                                                     6000
tttgtaagtt aacctgttct agttccatca ttctgtgtac agtgaagtat tgcatgataa
                                                                     6060
tgtaaatttt gtgaaaaact agattaaaat atataactgc ttgttatggt ttataattat
                                                                     6120
ataatgtgca atacaattcc tgcatcttta aaatgtctgc agaataactg tgaattttt
                                                                     6180
tgttattgga ttggccgtaa cttttagaaa aaaatcttgt tgatgataat gtgattttgg
                                                                     6240
ggaggtcatt aattgctttt tcttttttaa atgtagactt atataaatac ctqtttqtat
                                                                     6300
atagettgag taattgtgat atgattgtat accactaaaa tattgttaac tattataata
                                                                     6360
aagtcacagt aatggtttaa aaaaaaaa
                                                                     6388
```

<210> 3412

<211> 1862

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (5)...(234)
<223> similar to gil872200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3412
tttcgtgcaa cctccacctc ctgggctcaa acaattctcc tgcctcagct tcccgtgtag
                                                                       60
ctgggactac aggtgtgcac cactacgctg ggctaatttt tgtatttttt ggtagagatg
                                                                      120
gggtttcgcc atgttagcca ggctgctctt gaactcctga cctcaagtga tccacccgcc
                                                                      180
tragcetree agagtgetag gattacagat gtgagacace gtgeccagee tratatatt
                                                                      240
tttgatgaaa gtctgctgag gatgaattct gtccactttt attatctgaa aacatcttta
                                                                      300
ttttgcctca ttttaaatag tatttagatt gggtgtagac ttctatattg ccaattagtt
                                                                      360
tettttagea etgtaaatae agatgteeag tatttteaga tteagttatt teagetgaaa
                                                                      420
agctagctga aagtcttgtt gctcctctga aggtaatatg acttttttca aaaaatacat
                                                                      480
ttataaaatt ttttttcttt gccttgatag ttgtactaca agggtgcctg gatgagactt
                                                                      540
tetetgaatt tgtettgett ggggtteata gaatetgtga ettgatgtet tteatgagtt
                                                                     600
ttgaaaaatg ctagccttta tctcttaaat attgctatta ctctactccc tcttctctt
                                                                      660
cagatattte agttacacca atggecaatg tttgeteatg teteatatgt etettgttet
                                                                      720
agtttctggå titgtattct tttttccttt tcacattcag tctggatatt ttctgctgac
                                                                      780
ctatattcca gttcactaat aatgcttttc actgtatcta atttgcttat aaatagaaaa
                                                                      840
ccattgattg agttattaat ttcagttata gaatagccag tgtagactcc aatgcttggc
                                                                      900
tocacttotc cactttttcg cotattttt toaccatctt coattttctt caacacacca
                                                                      960
gtcagagtca tttttaaaga cattttaaac acctcagtgg cctgtagatc ttatcttctg
                                                                     1020
ttttttgttt ctttttaatc ttagtttttt ggcacacttg gagggttttg attgaatgct
                                                                     1080
agacatagta ttcaggaagg cagagaggat tttttttaa gtcagatttt ttgaggtata
                                                                     1140
atttaataca gtaaaattca cctattttag ttcagttcta agagtttcct ctgtgacttt
                                                                     1200
tectttggcc catggtttat ttaaaattgt gttettttac ttecaaatta tttgggattt
                                                                    1260
ttctagatat ctttctgttc ttgatttctg gcttacctct atcagggtca gagaacaaac
                                                                     1320
ttaatatgat ttcaattátt ttaaatttgc caatgtttat tttatggccc agaatatggt
                                                                     1380
ctatgttggt gaaagttcaa tttgaacttg aaaagaatat gttttatgct gttgtctact
                                                                     1440
gaaaagtcta tatataaaaa atagattaat aaactgatta atagcctggt tcaccacttt
                                                                     1500
cgtagcctta ctgattttct ggttagtcat tctgttgatt actaacagat tctctaacag
                                                                     1560
agaagtataa getttetaae tataatggtg ggttaatetg tttetegttt eagttetage
                                                                     1620
agatgtttcc tcaatttttg acgttgcatt tttaggtgaa tgcacttctg gaattgtatt
                                                                     1680
gtgtccttgc tgaattgtcc cttttatcaa catgtaatag caccctttat tcttgataat
                                                                     1740
agtettigtt etgaattita ettigteigt tatteetata geettteeaa tittettieg
                                                                     1800
cttggatttt acgcgataag tttttcccc cattttactt tttagcaact ttatatttt
                                                                     1860
ta
                                                                     1862
```

```
<210> 3413
<211> 1832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1204)
<223> similar to gi498725 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3413
attcatacag gagagaaccc ctatgaatgc catgaatgtg ggaaagcctt cagtcggaaa
                                                                       60
taccagetta tttcacacca gagaacteat geaggagaga ageettatga atgeacegae
                                                                      120
tgtggaaagg cttttggttt aaagtcacag cttattatac accagagaac tcatacaggg
                                                                      180
gagaaaccat ttgaatgtag tgagtgtcag aaagccttta atacaaagtc aaacctgatt
                                                                      240
gtacatcaga gaactcatac aggagagaaa ccctatagtt gtaatgaatg tggaaaagcc
                                                                      300
tttacgttca aatcacagct cattgtacat aaaggagtgc acactggagt aaaaccctat
                                                                      360
ggatgcagtc aatgtgcaaa aacctttagt ttgaagtccc agctcattqt acatcagaga
                                                                      420
agtcacacag gagtaaaacc atatggatgc agtgagtgtg ggaaagcctt caggaqcaaq
                                                                      480
tcatacetta ttatacatat gagaactcat acaggagaga aaccacatqa qtqcaqqqaa
                                                                      540
tgcgggaaat cctttagttt caattcacaa ctcattgtgc atcagagaat tcacacagga
                                                                      600
gaaaatccct atgaatgcag tgaatgtggg aaagccttta ataqqaaaqa ccaqctcatt
                                                                      660
tcacatcago gaactcatgo aggggaaaag cottatgggt gcagtgaatg tgggaaagot
                                                                      720
tttagcagca agtcatacct aattatacac atgagaactc attcaggtga aaaaccatat
                                                                      780
gaatgtaatg aatgtgggaa agcetteatt tggaaateae tacteattgt acatgagega
                                                                      840
actcatgcag gggtcaaccc ttattaaatg cagtcaatgt gagaaatcct tcagtgggga
                                                                      900
aattacgcct tctttgttac accagagaat gcacacaaca gagaaaccat atgaatgcag
                                                                      960
tgagtgtgga aaagccttca ttaggaattc tcaactcatt gtacatcaaa gaactcattc
                                                                     1020
aggagagaaa ccctatgggt gcaatgaatg tgggaaaacc ttctctcaaa aatcaattct
                                                                     1080
cagtgcacat cagagaacac atacaggaga gaagccttgt aagtgcactg aatgtgggaa
                                                                     1140
agccttttgt tggaagtcac agctcattat gcatcagaga actcatgtag atgacaaaca
                                                                     1200
ttgataattt tacgaaactc tgaaaagtgg attcacaaga gatagaaaca atcatatata
                                                                     1260
aagagaaact ctgtaagtgg aatcatcttg tcatcttcca gaaaactcat actgaataga
                                                                     1320
aactttatga atgcacagca tatggaaagg catccacaga aagctgttct ttacatgcaa
aaagatagta gacaatacac aggaaaactg aatttagtaa ccactctgaa aatttttagc
                                                                     1440
agcaagtcat acctttttt aaaaaagttc atacaggtga ggaaccatgt taaacgttgt
                                                                     1500
aaagtcattt tactaacata agattcacaa agaggaaact tcatgaacca gatgaatata
                                                                     1560
gaatagactt ctttgaaatt catagtttac agaattttaa tgagagaaat tattgagcta
                                                                     1620
atgaatggca gaattaacaa aattacaaac attttatgta tcggaagcat ataccttgga
                                                                     1680
gggaccatgc tatgagggaa agtgtaaatc tagaaatgag aaacccctag ggaaaaaata
                                                                     1740
tatataggag tgaacatctt atgaatgtac caaataaacc acagctggac tgttaacctc
                                                                     1800
accttagaag cttcattcta aaaaaaaaa aa
                                                                     1832
```

```
<210> 3414
<211> 2072
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (268)...(1720)
<223> similar to gi4768275 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
tttagtgcag tatcctgaat ttagattcac acagagtttt aaatagtttt atttaaaaat
                                                                     60
tggtggaggg aaacccataa tttgaataat ggagtctctt aaattcagtc tgaattqgac
                                                                    120
tgcttgcatt ggtctgtcag gtgataacta aatttccctt tcagttggtc ctgttgaaac
                                                                    180
ggaaccataa aatgactgtg atattactta tccaacataa gaaggaaatc aqcattttat
                                                                    240
ttacatttta tccctgtttc aatacacaaa agcaactcca aagtgaattg tttgagattt
                                                                    300
aaggtttgct taactcttcc caaccctttg gcttttagat ttgcttggaa cggtagaaga
                                                                    360
aatccttcca agcctctcag aaaatatcag tgtttggggg atgaaagatt ctgttccaca
                                                                    420
480
ccaccatgtt gtctcactcc tcaagtctac ttgtctttac atttttacct ctggaacaac
                                                                    540
aggtctacca aaagcagctg tgattagtca gctgcaggtt ttaaggggtt ctgctqtcct
                                                                    600
gtgggctttt ggttgtactg ctcatgacat tgtttatata accettecte tgtateatag
                                                                    660
ttcagcagct atcctgggaa tttctggatg tgttgagttg ggtgccactt qtqtqttaaa
                                                                    720
gaagaaattt tcagcaagcc agttttggag tgactgcaag aagtatgatg tgactgtgtt
                                                                    780
tcagtatatt ggagaacttt gtcgctacct ttgcaaacaa tctaagagag aaggagaaaa
                                                                    840
ggatcataag gtgcgtttgg caattggaaa tggcatacgg agtgatgtat ggaqaqaatt
                                                                    900
tttagacaga tttggaaata taaaggtgtg tgaactttat gcagctaccg aatcaagcat
                                                                    960
atctttcatg aactacactg ggagaattgg agcaattggg agaacaaatt tqttttacaa
                                                                   1020
acttetttee aettttgaet taataaagta tgaettteag aaagatgaac eeatgagaaa
                                                                   1080
tgagcagggt tggtgtattc atgtgaaaaa aggagaacct ggacttctca tttctcgagt
                                                                   1140
gaatgcaaaa aatcccttct ttggctatgc tgggccttat aagcacacaa aagacaaatt
                                                                   1200
getttgtgat gtttttaaga agggagatgt ttacettaat aetggagaet täatagteea
                                                                   1260
ggatcaggac aattteettt atttttggga eegtaetgga gacaetttea gatggaaagg
                                                                   1320
agaaaatgte geaaceactg aggttgetga tgttattgga atgttggatt teataeggga
                                                                   1380
agcaaacgtc tatggtgtgg ctatatccag gttatgaagg aagagcagga atggcttcta
                                                                   1440
ttattttaaa accaaataca tctttagatt tgggaaaaag tttatgaaca agttgtaaca
                                                                   1500
tttctaccag cttatgcttg gtccacgatt tttaagaatt caggaaaaaa tggaagcaac
                                                                   1560
aggaacattc aaactattga agcatcagtt ggtggaagat ggatttaatc cactgaaaat
                                                                   1620
ttotgaacca otttacttoa tggataactt gaaaaagtot tatgttotac tgaccaggga
                                                                   1680
actitatgat caaataatgt taggggaaat aaaactttaa gatttttata tctagaactt
                                                                   1740
tcatatgctt tcttaggaag agtgagaggg gggtatatga ttctttatga aatggggaaa
                                                                   1800
gggagctaac attaattatg catgtactat atttccttaa tatgagagat aatttttaa
                                                                   1860
ttgcataaga attitaattt cttttaattg atataaacat tagttgatta ttcttttat
                                                                   1920
ctatttggag attcagtgca taactaagta ttttccttaa tactaaagat tttaaataat
                                                                   1980
aaatagtggc tagcggtttg gacaatcact aaaaatgtac tttctaataa gtaaaatttc
                                                                   2040
taattttgaa taaaagatta aattttactg aa
                                                                   2072
```

```
<210> 3415
<211> 2199
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2200)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) ... (1485)
<223> similar to gi5732237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3415
atgcgagget tegggeeagg ettgaeggee aggegtetee teeegetgeg gttgeeceeg
                                                                       60
cggccgcccg ggccccggct ggcgagcggg caggcggccg gcgccctgga gcgggccatg
                                                                      120
gacgagetge tgegeegege ggtgeegeeg acgeeggeet acgagetgeg egagaagaea
                                                                      180
ceggegeeeg eegagggtea gtgegeggae ttegtgaget tetaeggtgg getggeegag
                                                                      240
acggcccage gggccgaact gctgggccgc ctggcgcggg gcttcggcgt ggaccacggc
                                                                      300
caggtggcgg agcagagcgc cggcgtgctc catctgcgcc agcagcagcg ggagtcggcg
                                                                      360
gtgctgctgc aggccgaggt ccggctgcgc tacgcgctgg tgccgcgcta tcgcggcctc
                                                                      420
ttccaccaca tcagcaaget ggacggegge gtgegettee tggtgeaget gegggeegae
                                                                      480
ctgctggagg cgcaggccct caagctggtg gaggggccgg acgtccggga aatgaatggg
                                                                      540
gtgctgaaag gaatgctctc agaatggttt tcctccgggt tcctgaacct agaacgggtt
                                                                      600
acctggcatt caccgtgtga agtgcttcag aaaatcagtg aggctgaggc tgtgcatcct
                                                                      660
gtaaaaaact ggatggacat gaagcgccgc gtttgggccc tacagaaggt gttacttctt
                                                                      720
ttctcactgt tcgacccctg gggagcccct ggtcgttttg cacgtggcac tgactggtga
                                                                      780
catctccagc aacatccagg caatcgtgaa ggaacatcct ccatcagaaa cagaagagaa
                                                                      840
gaacaaaatc actgctgcga tcttttattc catcagcttg acccagcagg gactccaagg
                                                                      900
ggtggagctg ggaacattcc tcaataaagc gagtcgtcaa ggagttgcag agagagtttc
                                                                      960
ctcaccttgg ggtgttttca agtctgtcac ctatacctgg tttcaccaaa tggcttctgg
                                                                     1020
ggcttctgaa ctcgcaaacg aaggagcatg ggaggaatga actctttaca gattcggaat
                                                                     1080
gtaaggaaat ctcggagatc acaggtggcc ccattaacga gaccctcaag ctcctcctca
                                                                     1140
gcagcagcga gtgggtgcag tcggagaagc tggtgcgggc gctgcagact ccgctgatga
                                                                     1200
ggctgtgcgc ctggtacctg tatggagaga agcaccgcgg ctacgcgctg aaccccgtqq
                                                                     1260
ccaacttcca cctgcagaac ggggcggtgc tgtggcgcat caactggatg gcggatgtga
                                                                     1320
gcctcagagg catcaccggc tcctgcggcc tgatggccaa ctaccgctac ttcctggagg
                                                                     1380
agacgggccc caacagcacc tcctacctcg gctccaagat catcaaagcc tctgagcagg
                                                                     1440
tectcageet agtggeecag tttcaaaaga acageaaget etgacagtaa aceteteeta
                                                                     1500
aagcacaggg ccccggctaa gaaaacgatc attttcagga ggggccggga gttatgtatc
                                                                     1560
tgaagcagct ttccaagcaa agccaaagtt gactgtgttc ttgtcccgca gccggtccac
                                                                     1620
actgtgagge caggeeteaa etteceteae cetgggegtg acatgcacec agtgcaagae
                                                                     1680
ggttgtgggg tgcgggtgca cacaaatgag tgggttgctg tgctgtctcc ggaagattct
                                                                     1740
gtcgttgccc ttggccctgg ctccctgccc ggggctggtg ctgtggtacc tacatcttca
                                                                     1800
ggaagetgtg cageetetge cattgecaat eccaggggga atetggeate etteettaag
                                                                     1860
gacccggggc gcgtgtgccc cagataagaa taggtgtacc ctttgtgctc ataaaacaag
                                                                     1920
aatgeeggeg aatgggttge ttttaaceng ttteteacee ttgcaattge agagggacaa
                                                                     1980
agggctgtgc ctacacttcc ccagttacat tctgaagcct cataaatgta tgagaaaggt
                                                                     2040
ttgtgaattt tgcacaaggt gtgtgtagta agttaaattg ttgaacacaa aaatgttgct
                                                                     2100
gettgaggea taagttggat aataggettt aaatgateag ggatteaggt teataatgaa
                                                                     2160
cttcacagta aagaacacgt ttgttctgta aaaaaaaaa
                                                                     2199
```

```
<210> 3416
<211> 6926
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(5403)
<223> similar to gi559330 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

3120

3180

3240

caatgtccct ggaaaagcca tcaatagtga gattgtttga tgatcttgca gaaaagattc

ataggcagta tgaaacaatt ggcttggact tcacaattcc aaagtcatgt gttgaaatag

cggaattact tcaacagtca aaaaacccct ctatcaacca catattgctt agcccagaaa

```
aaattaagga aggaattaaa cgccaacaag aaaagaatgc cgatgcccta aggaactatg
                                                                     3300
aaaatttggt agacaccttg ctagatggtg tggagcaaag aaacctgccc tggaaatttg
                                                                     3360
aacatatagg cattgggctt ctgtctctac tgctgagaga tgaccgagtg ttgcctcttc
                                                                     3420
gtgccatacg gttttttgtt gagaatctca accatgatgc aattgtagtt cgaaagatgg
                                                                     3480
ctatctcagc tgttgctggt atccttaaac agctaaaaag aacccacaaa aagctgacca
                                                                     3540
ttaacccctg tgaaatcagt ggatgcccta aacccaccca aattattgct ggtgataggc
                                                                     3600
ctgataatca ttggttgcat tatgacagca aaactatacc aagaactaaa aaagaatggg
                                                                     3660
agtcaagttg ctttgtggaa aaaactcact ggggatacta cacctggcca aagaatatgg
                                                                     3720
ttgtttatgc tggtgtggaa gagcagccta agcttggcag aagcagggag gatatgacag
                                                                     3780
aggcagaaca gattatattt gatcattttt ctgatcctaa atttgttgag cagttaatta
                                                                     3840
cttttctatc attagaagac agaaaaggaa aagataagtt taatccacga cgtttttgcc
                                                                     3900
tetttaaggg tatatteagg aattttgatg atgeetteet geeagttetg aageeceatt
                                                                     3960
tagaacattt ggttgcagat tcacatgaaa gcacccagcg atgtgttgca gaaattatag
                                                                     4020
ctggtttaat cagaggttct aagcactgga catttgaaaa ggtggagaag ctttgggagc
                                                                     4080
ttctgtgccc tctgcttaga acagcactgt ccaatattac cgtagaaact tataatgact
                                                                     4140
ggggagcttg tatagcaaca tcctgtgaaa gcagagatcc ccggaaactt cactggcttt
                                                                     4200
ttgaactgct gttggaatca ccattgagtg gtgaaggagg atcctttgta gatgcatgtc
                                                                     4260
gactttatgt actacaaggt gggccttgcc cagcaagaat ggagagtgcc tgaactattg
                                                                     4320
cacagactac tgaagtactt ggaacccaaa ctcacccagg tttacaaaaa tgtcagagaa
                                                                     4380
agaataggaa gtgtgctgac ctacatattc atgatagatg tatctttgcc aaataccaca
                                                                     4440
ccaaccatat cgcctcatgt ccctgagttt actgctcgaa ttctggagaa attgaaacct
                                                                     4500
ctcatggatg tggatgaaga aattcagaac catgttatgg aagaaaatgg aattggtgaa
                                                                     4560
gaagatgagc gaactcaggg cattaaactc ttgaaaacca tattgaaatg gctgatggca
                                                                     4620
agigcaggaa gatccttttc tacagcagtt acagaacaac ttcagcttct acctttgttt
                                                                     4680
ttcaagattg ccccagtgga aaatgacaat agctacgatg aactgaaaag agatgcaaag
                                                                     4740
ttatgtttat cattaatgtc tcaggggttg ctttaccctc atcaagtgcc tttggtactt
                                                                     4800
caggtgctaa aacaaacagc aagaagcagt tcttggcatg cacgatacac agtactgacc
                                                                     4860
tacctccaga ccatggtatt ttataacctc tttattttcc taaacaatga agatgcagtt
                                                                     4920
aaagatatca ggtggctggt tataagtctt ttggaggacg aacaactgga ggttcgagaa
                                                                     4980
atggctgcta ctaccttaag cggtctgcta cagtgtaact ttcttaccat ggacagtcct
                                                                     5040
atgcagattc attttgagca actttgcaaa acaaaactac ctaagaaaag aaagcgagac
                                                                     5100
cctggttctg taggagatac cattccttct gcagagttgg tcaaacgcca tgctggggtg
                                                                     5160
ctaggacttg gtgcatgtgt tctttctagt ccttacgatg ttcccacctg gatgccccag
                                                                     5220
ctcctcatga atctcagtgc acatctaaat gatcctcagc ctattgagat gactgtaaaa
                                                                     5280
aaaaccttat ccaatttccg aaggactcac catgacaact ggcaggaaca taaacagcaa
                                                                     5340
ttcactgatg accaactget tgttctcacc gatcttcttg tgtcaccatg ctattatgca
                                                                     5400
tagaaagatg actagtcctc acttcaggct cttttcatca aaaattccac accctcaggt
                                                                     5460
accatetgtg gtggetetet geaagtttta aaactgeete tgetgagete teatcatttt
                                                                     5520
ggtggtttct gtgttagatc tcgttagtct gcattccaca gcttctcagt tgccatttga
                                                                     5580
tttcccaact tgtccggaag tgtttccaga atactgatca ctttttttt ttgaggcatc
                                                                     5640
tgacaaagtc acaaagtctc agactagaaa taattaccca gtatgatcat ggcatccaag
                                                                     5700
accagagtet cagaacteat taagaaacag tttaettgga atggagaata cecatetgta
                                                                     5760
atacaggice igicattica ticateteaa attattitga attetteeca aaiggeiget
                                                                     5820
ggatttaggt ggtaataggg gctgtgggcc ataaatctga agccttgaga accttgggtc
                                                                     5880
tggagagcca tgaagaggga aggaaaagag ggcaagtcct gaacctaacc aatgacctga
                                                                     5940
tggattgctc gaccaagaca cagaagtgaa gtctgtgtct gtgcacttcc cacagactgg
                                                                     6000
agtttttggt gctgaataga gccagttgct aaaaaattgg gggtttggtg aagaatctg
                                                                     6060
attgttgtgt gtattcaatg tgtgatttta aaaataaaca gcaacaacaa taaaaaccct
                                                                     6120
gactggctgt tttttccctg tattctttac aactattttt tgaccctctg aaaattatta
                                                                     6180
tacttcacct aaatggaaga ctgctgtgtt tgtggaaatt ttgtaatttt ttaatttatt
                                                                     6240
ttattetete teeettttta ttttgeetge agaategttg agagactaat aaggettaat
                                                                     6300
atttaattga tttgtttaat atgttatata aatgtaaaag agtgtataaa ctgtagagat
                                                                     6360
agcattggca agacattgta cagatgcaac cttttacaca acatcattgt gtaatttgta
                                                                     6420
aagattcacg tgtagttctt tattatagtg attttgggct ttgtacccac tgaatgccat
                                                                     6480
tttttgtgtt tttaaattat tttctttatc ttgttacaaa aactgagatg tggggttttt
                                                                     6540
ttttttttta agttcactta tcattagaat gtctgaactt ttatgtaaca tttttggggg
                                                                     6600
gcttttttaa aggctaacac cacatgtttg cccctatgac aagtttcata gagtgaaagg
                                                                     6660
```

```
tatcttctgg gttgaaataa ttcacaaatt ggtgaatgtc atcttgcaac acaccctgta 6720 cagtcttcct taaaggaaca ctacagtata tttttagtat ctacatgctg aatgactgaa 6780 tacagaccta agcacagcag tggtcctggt acagtattta agtgtcggca tacacaggcg 6840 taatccctgt ataaagtagt gccaaactga tttcagttgt gtaactagtt taaaacccaa 6900 taaatggatt ctttttaaaa aaaaaa 6926
```

```
<210> 3417
<211> 3786
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3787)...(1585)

<223> similar to gi2460117 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3417 agtccgtgcg gtggaattcg tctggtggag atactggtcc accagagaat gggagagcgg 60 ctggagcagt gtccctggga agcgttgttt gtttttgaga tggagtctca ccctgttgcc 120 egggetggag tgeaetgatg tgatetegge teaetgeaac eteegeetet eaegtteaag 180 caatteteet geeteageet eetgagtage tgggattage tgttggggae acgaqatgeq 240 ccaccacacc cagetaattt tgtgttttta gtagagacgg ggtttcacca agetggccag 300 getggtetea aaateetgae eteaggtgat eeaceeacet etgeeteeca aagtgttggg 360 attacaggcg tgagccaccg cgcctggcct ggaaacactt tcataccatg ttaatttctg 420 agactggggc tcaagttaaa tttaggttaa gggtttagga taagttagct aagatagccc 480 agaactttca taatatgaca gatctctaaa aataaatggc tcttttaagg cagcatgcca 540 tcaaaaaaaa gtacctctaa tgggattcta attatttagg ttaaactttt cctcatattt 600 tattttcaca tggaatccta aaaggttcgc cccgataagg cagaacatct taggttgtag 660 aaaattatac atggtatett taetgggaat attagetgtg eeaettatta getgtgaeet 720 taggcaaatt acttcactta tctggcctgt ttcttcggcg gtaataaaaa acaacagtac 780 ctatctccta cagtaggtgt gaggattaac tgggctaatg agaaatgctc agacacacag 840 900 tattttacca gcagtcacag gtttatctga gatgcaacaa ggcctgaaag ggtgagtcga 960 etccactete cagtgeetga aagtttettt ttgtgetttt gacagageae ttatttett 1020 gatttgaaaa ggcaaaagcg actctgtttt tgtacttaat taggggtaaa tcacattcaa 1080 gtatcagact gaattaagtg atacaacttt ctcaaatgga tcactttaac ttcctcttca 1140 ttgaacaaga taaattttat taacactcat aaatttaaat attttggata ctagaccttt 1200 atcagttaga tgatttgcaa atatgttttc ccattctgta ggttgttttt ttcactttct 1260 tgaataatca taaatttagt tittgacaaa atcitgciit tatagaaatc tataccatta 1320 acttaagtag ctgtttttga aaaaataaat actgtttaaa tttagatata acagtattcc 1380 ttataaaaat ttattttatg gttttaaaaa atatttaaat tattgtataa acatttcttt 1440 aaaaatatgg tetgtagaaa gaaaagagta aaacetaagt tgtaaagtga cagtgatttt 1500 tgggttccat cattttattc acgtaatcgt gggaggatcc atctgattcc gtgggaagct 1560 gagggctaga ggctgccact gtcacactgc attctttctc atttcaccca agaagtcata 1620 ggtctgctct gadaggtcaa aaggttcatg aactccgtct ggtgacagca gagcttggag 1680 ggcgccctgg ttttcttggt tttgcttaag gaagtcagtg ataactttcc accgtgcagt 1740 ctcagtctct tcttctgccc acctgaatgg gggtaggcgt gtgggagtgg aagaagtggg 1800 agcacgcage caatggtaaa ccaggagaaa acgtgggact ttcaggaact cttttggete 1860 tettetetga tetttttaat gtggetttet tgteeageee acgaacteet gagageatee 1920

```
atcacatcag gctgctccaa gagcatgggg aaggtggcca gcatgggatg gctaattaaa
                                                                     1980
tcagtacttt gcaagctcat cctgtctttc aggagcacat ctccaagaat ttgtcgataa
                                                                     2040
aatatcaaca agtgaataga acacatattt ccaattaatg tttctggcag tagacttagt
                                                                     2100
acatttettg atettetgtt caaggatete agttteaeta gaagttgagg etgeettete
                                                                     2160
attgtcataa tetggtagaa aacaetgeeg tgtgetette tggatattga agggteeaet
                                                                     2220
tcaatacctt tttcataagg agtaccacca ttcaagaaaa gctcataagt ttttgctgga
                                                                     2280
ataggaacte cactggeate aaaaagttta agaaacacee agecacaget taacteteet
                                                                     2340
ctttcaccag ttgaattgcg aatataagaa attccaagtt caaataatat tccaagatct
                                                                     2400
ggagatgcag aattagacct gataaagcaa tcaccatcaa gcaaacatgg taagatgcga
                                                                     2460
gtaacctggg gagaaaaggt ccatgttttg ggctttttag gttgccatgt ggctctqact
                                                                     2520
gtatgaatgt tgctcagaac cttattacca tcaaatagac agaggcgtac atgtctgctg
                                                                     2580
agaacctgta tgctcattcc tggaagagga atcattttac agctccataa tqtcaqaatc
                                                                     2640
aatgaaatac gacttggtct cgacctaata gtgccttctg tagcatccca catcagatct
                                                                     2700
ctgaaggcca gttgtgaagg catgagctct ggttgtaaga agtaatttgc tcgaaattga
                                                                     2760
ttcccttcct ccagaagctg tgagagcgtg gaaggcctga accctgcagg aatagctccc
                                                                     2820
atcgtagtta acacatcaac agtgtttatc tgttggagca caggcttaga aaccagaaat
                                                                     2880
atacgtcctc tgctctgtac attccatgcc ctgaaccctg tttcagatcc attggtgtct
                                                                     2940
tecacagtet ceatectatt tegeateaga actattaggt ageaaaaega gaeatgatta
                                                                     3000 -
acaagacaga agatgcccgc ctctgaaatc gctttctgaa cagcactcca gtggggatca
                                                                     3060
gttctttggc ttaacttctg ctccatctgc tgtttcatcc accgcctcta catcttcttc
                                                                     3120
actgccctct tcacttgatt cttggccttc ttcttcttca ctataaggct ctaggtaggt
                                                                     3180
totgggaaca agacetteat tteetttgge atcettaget atceaceaac cateaggttt
                                                                     3240
tttttcaatt acaaggagaa tttccccttt cttaaatgta agatctccaa cttgctgagc.
                                                                     3300
agtadaatct ccaacagcga tgtattcttc accggttgac catttgtgag attcattttc
                                                                     3360
ctetttetet teetetteet eetetgeate ttetteetee ceaceactgt etteaetate
                                                                     3420
ttcactttca ctttcttcct cttcttcagt aggtgcccca acttcagtta tattttctct
                                                                     3480
gcttattgtc acagcaaggc cctgcagttg ttgggtaagc ttgtccaaaa gagtatgctc
                                                                     3540
etettetttt etetgattat agtttgeaac aggtgeagat teateagett tgettaattt
                                                                     3600
ttgaagagca tttttatttt catctattgc ctgctttaac tggatacatc tttgataaat
                                                                     3660
atgttgtctt ttattgggtt ctagagcttc tttcagttgg ctctcagaaa gcaaactatc
                                                                     3720
aacctgttgc ttcagctcct gattgcggcg ccgcagggcc tggagaggat ctcgctgtcg
                                                                     3780
tctcgc
                                                                     3786
```

```
<211> 2783
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6) . . . (1436)
<223> similar to gi1503988 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3418

```
<400> 3418
atctcagagt ggcggaattc gccgggacca gccgctcggg gccgggctga tacagccgct 60
tcaccgtgcc cctgccgcg accatggcct cctccgaggt ggcgcggcac ctgctcttc 120
agtctcacat ggcaacgaaa acaacttgta tgtcttcaca aggatcagat gatgaacaga 180
taaaaagaga aaacattcgt tcgttgacta tgtctggcca tgttggtttt gagagtttgc 240
ctgatcagct ggtgaacaga tccattcagc aagggttctg ctttaatatt ctctgtgtgg 300
```

```
999aaactgg aattggaaaa tcaacactga ttgacacatt gtttaatact aattttgaag
                                                                      360
actatgaatc ctcacatttt tgcccaaatg ttaaacttaa agctcagaca tatgaactcc
                                                                      420
aggaaagtaa tgttcaattg aaattgacca ttgtgaatac agtgggattt ggtgaccaaa
                                                                      480
taaataaaga agagagctac caaccaatag ttgactacat agatgctcag tttgaggcct
                                                                      540
atctccaaga agaactgaag attaagcgtt ctctctttac ctaccatgat tctcgcatcc
                                                                      600
atgtgtgtct ctactttatt tcaccgacag gccactctct gaagacactt gatctcttaa
                                                                      660
ccatgaagaa ccttgacagc aaggtttaca ttataccagt gattgccaaa gcagatacgg
                                                                      720
tttctaaaac tgaattacag aagtttaaga tcaagctcat gagtgaattg gtcagcaatg
                                                                      780
gcgtccagat ataccagttc ccaacggatg atgacactat tgctaaggtc aacgctgcaa
                                                                      840
tgaatggaca gttgccgttt gctgttgtgg gaagtatgga tgaggtaaaa gtcggaaaca
                                                                      900
agatggtcaa agctcgccag tacccttggg gtgttgtaca agtggaaaat gaaaaccact
                                                                      960
gtgactttgt aaagctgegg gaaatgetea tttgtacaaa tatggaggac etgegagage
                                                                     1020
agacccatac caggcactat gagctttaca ggcgctgcaa actggaggaa atgggcttta
                                                                     1080
cagatgtggg cccagaaaac aagccagtca gtgttcaaga gacctatgaa gccaaaagac
                                                                     1140
atgagttoca tggtgaacgt cagaggaagg aagaagaaat gaaacagatg tttgtgcago
                                                                     1200
gagtaaagga gaaagaagcc atattgaaag aagctgagag agagctacag gccaaatttg
                                                                     1260
agcaccttaa gagacttcac caagaagaga gaatgaagct tgaagaaaag agaagacttt
                                                                     1320
tggaagaaga aataattgct ttctctaaaa agaaagctac ctccgagata tttcacagcc
                                                                     1380
agteetttet ggeaacagge ageaacetga ggaaggacaa ggaeegtaag aacteecaat
                                                                     1440
tttttgtaaa acagaaggtt ccagagcaca gaaggtcatc atcacaagca aactttatta
                                                                     1500
aaaaaaaact agaagtgtgc tttgattttg ctgttatttg ttttatcact tctatatttg
                                                                     1560
gtgaacagcc acagttactg atatttatgg aaaagtactt tcaagtacaa ggtcaataca
                                                                     1620
taagccagag tgaatgatac tacaagttga gcatctctaa ttcaaaaatc tgaaatccag
                                                                     1680
aagcttcaaa atctgaatct ttttgagcac tgacttgacc ccacaagtgg aaaattcccc
                                                                     1740
accegacace titgetitet gatggiteag titaaacaga tittgtitet igcacaaaat
                                                                     1800
ttttgtataa attactttca ggctatatgt ataaggtgga tgtgaaacat gaattatgta
                                                                     1860
attagagteg ggtecegttg tgtatatgea gatattecaa acetgaaate caaaacaett
                                                                     1920
ctggtcccta gcattttgga taagggatac tcagcttgta cctatatatt catatatt
                                                                     1980
cactgttgtt agaaatgttt aagttgctgt tctgtgatga atctaaatct tttctcttgc
                                                                     2040
taccaageta ttgtcactgc agtgcattat accaaagagc gaagtcagtg ccactgaaaa
                                                                     2100
tacagaaccc attaatatcg tggctatctg attacattta tattccaaga tgaacctttt
                                                                     2160
ttatatatgc taaaaatttt ggggaatatg ttttgggatg tattatggag ctaaaactct
                                                                     2220
aacctcttaa tagttttata gaacttaaaa attttttata caattaccca attggtgata
                                                                     2280
tgatcttaag cttttgtgtc agattattta atatgatgac ttcatgcttt attatgcctt
                                                                     2340
attatggctg acgtattact gtggtgaaac aaaatatctt taaaagttaa aacatccaga
                                                                     2400
tatataagct atttttcct aaggataaag tacctttgag catgagtgta tcacagcttt
                                                                     2460
cattaggaaa acttttcatt acatacttgt ttaaactctg tcttccaggg taaaaataat
                                                                     2520
aaggttgaat cattttatta aaaatacttt ttaagaaaat aactatgaac atctgaatat
                                                                     2580
taaagatata aaaatgcaca taattcatat ttcaggtggt atttgcattc agtgccttac
                                                                     2640
tggtattctc agaacatttt aatgatttct aacatttctt aacagtcata qatatataca
                                                                     2700
ttttcatttt ttgtacttga atattctaaa taaaactgac atttactctt gacaaataaa
                                                                     2760
acatatattt actaaaaaaa aaa
                                                                    2783
```

```
<210> 3419
<211> 838
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(839)
```

<223> n = a,t,c or g

```
<221> misc_feature
     <222> (40)...(465)
     <223> similar to gi780367 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3419
cacctcaagc cagctgggct gtgggcggca cctgtgctct gcaggccagg cagcgataga
                                                                       60
agcetttgte tgtgeetaet eecceagagg caactgggag gteaacggga agacaategt
                                                                      120
cccctataag aagggtgcct ggtgttcgct ctgcacagcc agtgtctcag gctgcttcaa
                                                                      180
agcctgggac catgcagggg ggctctgtga ggtccccagg aatccttgtc gcatgagctg
                                                                      240
ccagaaccat ggacgtetca acatcagcac etgecaetge caetgteece etggetacae
                                                                      300
gggcagatac tgccaagtga ggtgcagcct gcagtgtgtg cacggccggt tccgggagga
                                                                      360
ggagtgctcg tgcgtctgtg acatcggcta cgggggagcc cagtgtgcca ccaaggtgca
                                                                      420
ttttcccttc cacacctgtg acctgaggat cgacggagac tgcttcatgg tgtcttcaga
                                                                      480
ggcagacacc tattacagag ccaggatgaa atgtcagggt ggggttacag aggaaaggcg
                                                                      540
gggtgctggc ccagatcaag agccagaaag tgcaggacat cctcgccttc tatctgggcc
                                                                      600
gcctggagac caccaacgag gtgattgaca gtgacttcga gaccaggaac ttctggatcg
                                                                      660
gtgagtgccc agctgattgg gggtatggcg agtaaggggt tgtgatgccc cacctgctg
                                                                      720
caggaaccct gggccatggc ggctgccagc agatggcaag ggtgtgttga gggcctggag
                                                                      780
cccagagegg ngccagetgc tcaccccctt tcccggngag ggcccaggta gggagcac
                                                                      838
     <210> 3420 -
    <211> 1345
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1348)...(216)
    <223> similar to gi3283350 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

<220>

```
<400> 3420
ttttttttt ttcatcttat gacatattag tttattacat gcataaaact ataaatgata
                                                                      60
aaaatgaaaa atgtaatgaa cagtttatgt ttttttaaaa caaagtcaga ttttaaaagt
                                                                     120
tgtccacaga gagcaaaaat cactttacgt actcatgatg ggctttaata tttctttaca
                                                                     180
ctatacatac tgaaaatgtt tacatttact aataaggaat gcccaagcgt atccatcacc
                                                                     240
atttgaatag cttgcagggg atttgtgatt tcttccatgt tatctcttct caaaacccaa
                                                                     300
tetggettaa gtettgaaac tattetggte ettacaggtg tttetgggat aaaaggaatg
                                                                     360
cttatagaag aattettett ttgettgtaa agtattettt cagtatteat tttatgttta
                                                                     420
tgagctgtaa gtttgtagag actgtaaata cggtcaacaa ctttggacct acttcgtaca
                                                                     480
tcagaggete tatttgttgt ettcagtaaa atagecaaca aacaacaagt ttttgtaaaa
                                                                     540
atgetteege etttgtetge aactttatta eeaggetttt eteggtatat etgeaaage
                                                                     600
tecaatagta tatetataea attitetaea teataaaetg etgaagtagt titeteatae
                                                                     660
ttagatacat taagcaagac ttgcacagca tatctgatga cttccataca aggaatactg
                                                                     720
cgattacaac ttcggatcaa aacaaatatt ttagaaattg ctccactctg ggccatgttc
```

```
tcacaacaaa gtggagacaa tctagtaact acctctaggt gttttaaqqc ctcaaqaatq
                                                                     840
gcagaaaggt gcttatatgt caaaaggtaa tgaagtgcaa gtgcagttct tttgtagagt
                                                                     900
ttgttttctt ctcgaatctc cctattaaca acttgaagac ttagtcgtat agctttaatt
                                                                     960
tttgtacaat catttttctt cctccaagaa tagcctctcc ataatqcctq aattttaatq
                                                                    1020
attocactag tgaattitto otgottitta oggaggagaa aatggogoac tqottictqt
                                                                    1080
attactgatg cagccctatt tegetggete agacattett gacctteatg etcaatettt
                                                                    1140
ttgatgctat gatatttctg aataaatctc ttttcttgta atcttgctcg aaaccatctc
                                                                    1200
tgaatacaga tgactgaatt aacctgettg ttagcattet teacagecag gtaaagttta
                                                                    1260
taggetettt gaattetaae ageatteagg tgataatatg cagetgeagt gaagtgaaga
                                                                    1320
agtcgaattt tggctctctg ttcta
                                                                    1345
```

```
<210> 3421
<211> 790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (98)...(449)
<223> similar to gi3875371 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3421
cgactacaga aacgctatgt attagaggaa gctgagcaac tggagcctcg agttaatgct.
                                                                       60
ctggaagagg acatggatga tgtggagtcc agtgaagagg aagaagagga ggatgagaag
                                                                      120
ttggaaagag tgccatcacc tgatcaccgc cggagaagct accgagactt ggacaagccc
                                                                      180
cgtcgctctc ccacactgcg ctacaggagg agtaggagcc ggtctcccag aaggcggagt
                                                                      240
cgatctccca aaaggagaag cccctcccct cgccgagaaa ggcatcggag caagagtcca
                                                                      300
agacgtcacc gcagcaggtc ccgagatcgg cggcacagat cccgttccaa gtccccaggt
                                                                      360
catcaccgta gtcacagaca caggagccac tcaaagtctc ccgaaaggtc taagaagagc
                                                                      420
cacaagaaga gccggagagg gaatgagtaa tggactcagt ttggttttag tccacatggc
                                                                      480
ctcctgtgga tataaggata tctgtatgtg gaaggattaa gatctccccc aggcagctat
                                                                      540
aagaatattt tagttttttt cttatcaagt ttctcaacct ttatttttaa tgaaggaggt
                                                                      600
gctgagtttt gtatcttttt aatcataatc aacatcagtt tttgacccaa ctaaccttga
                                                                      660
ctgtattcaa acttatgaga gtataaagga tctggaggtt ggggatatga ctgacaagga
                                                                      720
aaggetgtgg ceacetgatg accettteee tttttattaa aceggacaca cetgttteee
                                                                      780
aaaaaaaaa
                                                                      790
```

```
<210> 3422
<211> 6730
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(5954)
```

```
<400> 3422
gaaacatgtc attaagtttc ttaaatgacg aagaggccag gaagatcctt caggtgctgg
                                                                       60
aaaggaatga ggagttacag agggccgaga aggacaggat cagcaaactt cagaagacaa
                                                                      120
agagggatat cagatggctt cagggagtga ctggtgaatg gtttgaagaa attcaaagaa
                                                                      180
aaaagttttg caatgaaaca gatgttagcc aaatgttaaa acaaccactt acatacaggc
                                                                      240
taagtaagga gatggcaaaa aatgatccga tagaattacc tacatcaaga tctaaaaatg
                                                                      300
taactaatca aaaaaagccg acaccttttt cttcccggat gagcttcaga tcgtcatttg
                                                                      360
cttccctgtt ctcattcagg aaatctggaa aggagacttc aaagcttcca tcactgggac
                                                                      420
agaaaggatg tgatggccat gcaggacctc ctatgcctgt gaggggagct gctgtgcagg
                                                                      480
caaaaatata caattcacct ctggaaaatc atctagttga cagtacattt gtcccaaagc
                                                                      540
cagcagtcat gagggaggag agtggcatgc ctccaccgtg ggatgcttca ctgctggaga
                                                                      600
atgagttttt ccaagtttta gatgacttgg atagcaaatt ggctcaggaa cagtctgcaa
                                                                      660
gctcagtgaa taccagaaca cccctcaact atggatcaag aacacagttc ggtcactttt
                                                                      720
attccagtgg taacagacat ggtaatatca cagaaaggca caaaaaacac tataatgaaa
                                                                      780
cttccaatat gtctatctat gacatcctaa gaccaggaac tcctagggaa ggttttaaaa
                                                                      840
ccttttctcc taggacaagc acaatttatg atatgtatag gacaagggag cccagagtct
                                                                      900
ttaaagaaga ttatgtgcaa aagaatactt ttggcagtac ttcgctgtgt tttgacagca
                                                                      960
ggcaacggtc ggccttacca gccacagggc atttcacagc aagaagctta cattttccag
                                                                     1020
ccacaactca gagcaagagt gggtttatac caccaaggca/ccagcagagt ccaaagagaa
                                                                     1080
ctcctttatc atccatcata tggaacagat cagattcctc tagagacagg gagaaccagg
                                                                     1140
aagagtteet gagggeacca teaccaatgg aaattgatee egetgacaag tatgtgtate
ccaggggttt tcaggagaat aagagatatg aatcgtacca ttcacagaat gtttaccaac
                                                                     1260
gtgttägttt aaatgctccc atggagaatg caatgagtcc cgacactttt gagaactcag
                                                                     1320
agaacatgcc attctaccat caaagcaaca catttaccag atctttcttc agcaatacct
                                                                     1380
ttggacgaag cggagaacag aggagatttg gacaaggtcc tttttggggc caagagaaag
                                                                     1440
gacattettt etggtetgae ttteategaa geaggaaate atteagttet tetgacagag
                                                                     1500
actitgaaat gatttccatg gaagcaaata gtgtatcagc cattcatggc cataatgttt
                                                                     1560
cttctgaaca ctgggaatca ttttcttctg gttatggaac agatgtttcc agaggccaag
                                                                     1620
aagagccaca teettggcag tttgatttte agagateeac aetggatage atggtggtat
                                                                     1680
cacatggtaa tgagacccag ttgactcctc attttggcac accaaatgtt tgctccatga
                                                                     1740
ctggttcaag ctatcacgtc aaatctagtg agttggtaag tcaacaggac agttctcctg
                                                                     1800
tagaagtaca tataaacaaa gaagcttcct catttggaat tgctcagact ctagcatcct
                                                                     1860
cattcaaaac tteettttee cagatttetg atgacagaag gaateeteag agteecaact
                                                                     1920
tgcagaatcc cacagtcact ttgcagaaaa tttttccaaa taaqcctqcc tctcatccaa
                                                                     1980
tgagaageca tacagaagte actgtgacca acagcaatte agttgactet etgectettg
                                                                     2040
ccaaaagcca gcccaatatc ttggtcacag aagtaaataa tgagaaagac ttaaatgaat
                                                                     2100
ctatttcaga agaagacaaa cagctaagca agatggacca gacaaacaag qcaqqtgaaa
                                                                     2160
taccccaacc tgtttcacag acagggatct caaactcttt acctgatttt caaaatccct
                                                                     2220
tatcccagga ctcagccaag agcaacgggt ttggttttaa tgcatctacc ataataagtt
                                                                     2280
caaaaaagtc acccagagtc ttttccagga aagatacctc caaaatgtat ataccgcaca
                                                                     2340
cagataaatc caatgacatt aaacaagata agaggtttac tgaaaacaga aaacttggct
                                                                     2400
caacagette cetteettte atteaggaac acagaacace accatettte eccaggacag
                                                                     2460
accaaggttg tcaccaggaa ttaactgtaa ataatgaaga tatttcaaga attattacaa
                                                                     2520
ataaccactg gagetetgea etgaetgata etcaaaatge acaataetea aaatgeaagt
                                                                     2580
taactcctgg ccacaagacc tcgtgtgatt ctttagatct gtcatcagct gcactaccag
                                                                    2640
attecteace atcaaagaat tettecettg atgeteetgt ggttecatet actacagtgt
                                                                     2700
tetecaggag aagteettea gacaaagate categetagg agaaagagaa gaaaaagaca
                                                                     2760
atgctgggaa gaaccaaaag aatcagttta ttgtaagcca ctcagaaaac caagagagaa
                                                                     2820
atgatagtcc tgtgcctaca catgatgaag tggttgatgt caaatgccat tcacactctc
                                                                     2880
cttttaggaa tgaaagagga aaaggaaaaa taaggcatca tatatcctgt attgaaaagt
                                                                     2940
taagcaaaac agaaagtata tcagtaccca ccagtgatca caggagcctc attgaagcaa
                                                                     3000
```

```
atcaaagcaa ttccaaagtt tctgaacttg acacaattta ttgtaccttg ccaagaaaat
                                                                     3060
caagcagttt tctcatacat ggcaggcagt caggaagtaa aataatggct gcttcattga
                                                                     3120
ggaatgggcc acctcccttc caaatcaaaa ataatgtgga agatgcaatg gggaactata
                                                                     3180
tgttaaacaa atttagtccc agttctcctg agtcagcgaa tgaatgttcc aaagtccttt
                                                                     3240
cagactcagc cctggaagca cctgaagcca cagagagaat gacaaatgta aaaagcagtg
                                                                     3300
gatetaette egitagaaaa ggaceaette eatteeteat eaacaggget atgteatgte
                                                                     3360
cctcagggga gccacatgcc tcaactggaa gagaaggaag aaaaaagcca ttgacctcag
                                                                     3420
gcatggatgc ttctgagcta acaccaaggg cttgggagag aatcattagc cctgtggaaa
                                                                     3480
gtgactcatc tgttagagat tgttctttaa ccaaaagaca acaccaaaag gaaaacttcc
                                                                     3540
aagaatacac tgagaaagag ggtaaaatgg ctgcctccag gagaagtgta tttgctcttt
                                                                     3600
caaatgaaga ccctttacct ttttgctcag acttgtcagg aaaagaacgt gggaaaacat
                                                                     3660
tacataaagt taagacgact agtacgtttt ctgtttctgg tgatgaagat aatgtaaaat
                                                                     3720
gtctggaggt ggtctcaata tattacactc taccgaggaa acccagcaaa aaattctgta
                                                                     3780
acctccttca acagtataca caaaatacta atttacttat agaatcacct caagtggaga
                                                                     3840
ctgaaacatt tcctaacgct ttagaaaaag acaaacagaa ttattctaca cgagagcagt
                                                                     3900
caggaacacc ttcatgtgaa aatctaaaga tgtccgtcaa ctctgatcag acgctcacca
                                                                     3960
ctgaaaatat gactgccttc cgattatcaa atagggggcc cctagctcct acattacagg
                                                                     4020
aaatggette tgttgaggea getgtttete tteetgaaga ggaatetaaa getagagaga
                                                                     4080
ttttttcaga taatttagct aaaacacctc taggtgattc agaaaacaag aaggaaagag
                                                                     4140
gcaaaagtt gcaaagtgaa accetgeata etteattgat getteagaga aaaaatgtat
                                                                     4200
ccgaagaaaa atctgaaaat tgtcaacaat ccattaattc aagtaacagt ggtccctcta
                                                                     4260
gtcttccagc tctttcagaa gttaatattg gaaattccca aactagaaga agttcttggg
                                                                     4320
agtgtacagg gagtggtaga gccattccat ttactggaag tggcaagtgt ccccagaaag
                                                                     4380
atcacacatc cacagetgta ggtgatgget ccagtggatc acagectagg gaaggcagag
                                                                     4440
gggacattgg aaccaactgc caaaaaatga ctaataaaac actttctcac tcagagagtc
                                                                     4500
aagtetttge eettaeteea geattgeata aactacaget tggtgaggag acteagteag
                                                                     4560
atgaaccaaa cttagagagt ctgcagtctg aaccaagaga attacctcaa agaagtcagg
                                                                     4620
aggcaaatat gacagagac aggaaggctg aagatgaaat gcagaagtca gcttgggatc
                                                                     4680
aaccttcact teetgaagga aacaaaaata aaaccaactt ggatgaccta gtaaaggggg
                                                                     4740
aaaatagatc ttcagttaaa cacagattgg cagccatgtc taaagccagc agaaaattcc
                                                                     4800
cagctaaaga tgtaagcccc agaagacatg tagctactat cttcccccaa agtggaagca
                                                                     4860
gatetggett tgaccattta tetettggea cagtggagtg caacccactg tteectgage
                                                                     4920
ctactccaaa atctgcagag tccattggcg aaagcaggtt gagtgagaac ggaaagcatg
                                                                     4980
tgaagaaatc cgagaacctt ctccccatta ctgtactacc caacagagaa ccttctacac
                                                                     5040
acgtcagcaa ccagaagtet aacagcattt cacaacgaca tcagaatgag tttaaaaacg
                                                                     5100
totcagaato accatcaaag catgagaatt ctaaagacgt cacagcagct cagaatttag
                                                                     5160
taagagaatc aggagcccca tcacccatca cattcaccag cctcagggaa gcagaattct
                                                                     5220
ctgacaatca gaggaggetg ageceteett ttecaetgga geetgeacag aaatetagag
                                                                     5280
taagcagted actggegeag tittetgeag caacaaagga gigeticate teiggagigg
                                                                     5340
gaacctgagc cacacctcta tcgttcaaag agtttaaaaa gcattaatgt tcatggcgat
                                                                     5400
ctactacgaa aaagccatcc tccaaaagtc agggagcgcc atttttctga aagcacttct
                                                                     5460
attgacaatg ccctgagtcg actgaccctt gggaatgaat tctctgtcaa caatgggtac
                                                                     5520
agtcgaagat tcagatcttt ttctgaactc ccctcctgtg atggaaatga aagttgggct
                                                                     5580
tategeageg ggacaaaaac aggteecagg tetgeaatat etatatacag acetategae
                                                                     5640
tatgggatct ttgggaaaga acaacagtta gctttcttag aaaatgtaaa gaggtcactt
                                                                     5700
acacaaggaa gattatggaa accaagtttt cttaagaacc ctggcttcct aaaagatgat
                                                                     5760
ttgaggaacc ctcccaaccc ctcagagtca ttaagctcaa attctcccag tagtcaggtg
                                                                     5820
ccagaagatg gettatetee aagtgaaceg ettaatatet atgaggatga eccagtggae
                                                                     5880
tcagattgtg acacagacac aaccacagat gatgaatact acctggatga aaatgacaaa
                                                                     5940
gagtcagaac tgtgaggctt tttcaataaa atgctttact tttttcacca aaagcttata
                                                                     6000
atggaactaa ggtgtacatg tgcatgtgca tggaaggata aaagatctag tctgggcagt
                                                                     6060
gtctgctctg aaatgtccca catctccttt tttttcctcc acaccctata tagacacttc
                                                                     6120
ctgaatgcta gaacaatgaa ttcttgtttt gagagagtct ctgctatttt ctatctctgt
                                                                     6180
aaatgttett ageetgeett teeaceacte ceacttaate eetgatteae tgtetgaett
                                                                     6240
gggctttetg ctttacttcc ctcctaacat ttttcatctt taattgtgat ttacaaccct
                                                                     6300
aatateeeag geacataeaa aaettatgaa ttaeeeagea caaetgtgaa aetetgtatt
                                                                     6360
gcttcttccg gtccacaccc tatactcatg acattaaata aaaggtaggg atgataacag
                                                                     6420
```

```
tggggtaaat attatcatce tgtttgacte atgaacattt aggaagttta aggtggtgat 6480 cttctettte aaacaaagat aaaggaattt attttttaac etgagaaact gattgcaaaa 6540 aggaagaaaaa aaagataaag gaattttgta agtactteet gttatateeg taggggagee 6600 tgggaggeac atggteaaag cacatgttga ggttatagat taggacetga atceetagta 6660 agecaataga aggttageag teetagaaat teetetgaaa eegtgggga etggetggat 6720 tattaaggge
```

```
<210> 3423
<211> 1902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1762)...(764)
<223> similar to gi854326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3423 tittttttt taagccttat atttttaata aaaaataaac agtctctgac aagcagtttt 60 ctgaatccca aaacaaagga aaagggaggg ggagaggtga aggggtcagc tagggtaaag 120 gagtgaagaa ggctcagatt acccctgcca ttctgccagg gcagaaggga tcagagtctg 180 ccccaactga agcaagaaga aaggtggtca gacttcagga aagacttcct gggagtcagc 240 cggtgcacga ctggtaaggg aagcaggagg gagcagatcc ctgcatgacc ctgggagaag 300 ggagtgttgg tgtccaaagc ggcagcttca gagtggagtt tccaggagtg gcatgttagc 360 atatgattgt ttagatgttt ggtgttcatt accatagggt cctgggacag gcaggttttt 420 tagggtetet tgaaacaetg tgtttetgga gggteeetgg aatggeeaga aetgaaggat 480 cctctccagg ttcttcaata tcagtgtagg agcaggtctg ggggtagccc ccccctgtt 540 agagagetea tgtgettggt agaagggagt cecatagggg aggeagaetg etgtgeatea 600 ccctgctgag tgtcatcagt gatgcagagt agcagaagct cctctcaggg gagaaaggtg 660 gtcttttgtg ctgctgtcat cctagtcagg gctgtgcttg ggcccgcccc agccagcatg 720 gcccaggtgc ctgcaccgca gccccggcct gtgcctagag tttaagctac ctcagtgcct 780 aggragttgt tgtcagcgtc cacatcactg gragaggtcc tgcattcctt gggagactgg 840 aggtgttgct ctctgcttaa cggggccttc tccccagggc gcagggtctc acagccctga 900 accttgcccc gagcccggag tgctctcaat ggggaggcca cgaggatgat gagggctcct 960 gaaagcacta aggcaaagag gacagtgaca gtgacaaagt ggggccagta ggactgctgg 1020 gcagccaggg cggccccacc actgaccctg gtcaacggga ccttcacatg ctcccggggg 1080 atgeetgeea gtteaggate cagggeeagg gtetggteet ggetgteeae ceagtaggag 1140 atcacagggt atgaaaagcc attctcagtt gcccagcact ggtagagacc cccaactcca 1200 tectgeacta teageaagag ggageeattg tagacagtgg aagaggette tgggaetget 1260 gctgggccat gactccaata ataagaggcc aaggctgaca ggtgggggca ggggagctcc 1320 aggatggagt tagggacagc caggacttct ttaatgattt gcgggcggct ctgaggccga 1380 aggeteetge teatggggee actggeacat geceaetetg ggtteeceeg etecatgtee 1440 tgcttccagg agttcaggtt gggggcagac aggaggcaac aggttcggga ctcagggtcc 1500 caggcacagt gggggtcccg ggcaaggaca cagtccacac agctctcata gacactacag 1560 ttggctcggg gcaccctcca gacacctcct gagaagccta caaacactgc accctgggtg 1620 ggggccagct gcaggttgcg aacaggttca gggtcaggga acagctgaat ctcttccacc 1680 agatgageae tgetgteeec acttaceaea geettgtgga gegaeecetg tggtgattee 1740 caggtacatg acaagatggc tgcggacgcg tgggcggacg cgtgggtcga ccgggattcc 1800 gggaggacta cacgtcaagg tggctcttga gattctagta ctagatgcga taagtagatt 1860

```
<210> 3424
<211> 2416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2410)...(454)
<223> similar to gi4755188 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3424
tttttttttt ttatcattat attcttttat ttatagactc tgagagcaag gacccaagca
                                                                       60
cagcotggtg ctcttggata gagaagaaag cagctattgt ccacactcag aggttgctga
                                                                      120
ggtgccctcc cccactgatc tggaatgatc tacactgcta gtgaagagga gggatggcaa
                                                                      180
gctgactaaa taagaaggca gggaaagaaa gtccgcttta gttctgaggg ctgtgacatt
                                                                      240
agatgagagt ggagccctgg gcatgtcagc cagccttctg tgtaacgccc gcccaggtcc
                                                                      300
cattgtgtct gttctcttgg tcctccactg ttgcccacat cttcctccag gctgcttaag
                                                                      360
tgcccctcct ggagtgcatg agtaggtcgc gttgcagccc agcctccagg ctggaggtca
                                                                      420
gtctggctgt gggagggtcg gtcagcagag tcaatttgtt gaaaacacct ctgccaaagt
                                                                      480
agtcagcaat cacagaaaag ctgtcattgg agcacttgaq ctgatqctqq aattgatcat
                                                                      540
ggagateteg tttetgttee tgggeeegga teatateeat gaeetteegg tttteaggga
                                                                      600
ggcaggtggg gcagtcagca tcactttccg agtaactctc aaagcagtgt tggtggaagg
                                                                      660
agtggccaca caggaagtgg actgagggca actccaaggc actgttacag atgctgcact
                                                                      720
tggtcttttg gaaaatctta ggactggcct tgagctcttg gatctcctgg cggatacggg
                                                                      780
tggtctcctc tcggtaccgc cgcacccgca gctcatcctg tgcaatctgc tggctctgtt
                                                                      840
totgtagttt ttggaccagg tagtcoctga tgacggagag tgtggctgtg gagttgtggg
                                                                      900
ccagggtctg caccactaga agaggtggca tgaggttctt gttctcgata tgcttgagga
                                                                      960
cagetgeeac atacteettg cagteeteet eettgegage gaagtagetg agggeetget
                                                                     1020
cccacaagga ggggtcctgc tccccatggc gctcacacac gctgatgacc tgccggtact
                                                                     1080
gctcgtgctg catgtggtag tgcatgatct gctggaacag cttcccctgc tcataaaggt
                                                                     1140
aaaggacace ateetggaag tegtgeatet ggeacaggae cagggeettg teaaagaegt
                                                                     1200
egeagaageg accaetette ageagggaaa tggeetetge gtgaagette tetttgaeet
                                                                     1260
gtggatcett etegtgggee cagttetgea gtegeagete aaggagtgtg tegtagatee
                                                                     1320
cctggggtga gtctggctgc acttcactca tgtgctctag gaaggctttc agctctcgcg
                                                                     1380
ggttattggc aaagatgggg atgaacteet cagagttgge cetgeaagee tggggeetee
                                                                     1440
ctatogotgo ggoottogag gotgggooga taatoagtad aaagtooott cagcaactga
                                                                     1500
gttgtctgct ctggtatgtg gtgcatgagg atcttgccgt agcgcttcat gttgctctct
                                                                     1560
geetgeteaa aaggeagett geegatgtat egaagggett eetgataatt ettaatgtet
                                                                     1620
totagotgga tottcaggta coactcatga tgtgcatggt totccgccag atacagggca
                                                                     1680
tgggagtagt agccagcctg ccggaggacc ttgatggctg tctccacatc aaagtggact
                                                                     1740
teacteteac tetttttett gatgaactee teeagetteg agetgteett gagettggta
                                                                     1800
tagcagttga ggagcagggt ggtatggtcg gcattggcca gggattgtcg gtgcagggtc
                                                                     1860
tgcaggtagg cagtcaggtt gtgaatgcgc tgggcatcca gaaacttgcg gatcacgtag
                                                                     1920
gatggeteca aetttecaat ggtteggata tattgetgga eageeceate gtggttgeee
                                                                     1980
ttgctgtaga gatggtctcc atactgcatg aaaatctggg ccagcccatc actgtccaga
                                                                     2040
tgctggctct tggcaaggtt aatcgccatc tcaaataggt tcttcttaaa cagcatctcc
                                                                     2100
agtttggtct gtgtgtcctt ctcctgcagt gcgtggaccc gcccatcccg cgtcagcacg
                                                                     2160
```

```
tacagggage eccaeteage aageacatee actaeateet caaagaeggt getatagget 2220 atgaacttgt tgeacaggte atagatgtt agaatetget tgteggaget etgtgaatee 2280 etgetggtaa actetgaett gggagaaace tteeggteae gggagacaat gataaggtag 2340 ectecaaace agtgggeaat gagettatgg eccteaaagg egaageaggg eccaegttea 2416
```

```
<210> 3425
<211> 4730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4141)
<223> similar to gi5689571 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3425

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ttgattttgt tgtatcctga cttagaacac atcagtcccc atcaacccat gacttctctt

cagtatttgc atgctcagtc aatcacatgt caaggcatgt tcctctgtgc agtgatacga

gcttttgcat cagcactgtg catgtaagat gcacccacaa tggattggtt taatcacatc

tactctgcct tacatgggaa aagttctgca gagagtggtt gtttctgtga cactacaact

gtgcagaaat ttagataatc taattcagca gtacaaatac gaaacaggat tatctgatag

taggcctctg tggatggcat caattattcc accagatatg attcttactc ttttggaagg

1620

1680

1740

1800

1860

1920

```
gattacagce attatecatt actgtttgtt ggatecaaet acacagtate accaaetttt
                                                                     1980
ggtcagtgta gaccagaaac acttgtttga agcacgcagt ggaatcctct caatccttca
                                                                     2040
tatgatcatg teetetgtga cactgetttg gageatactg cateaagetg attetteaga
                                                                     2100
aaagatgact attgccgcat ccgcatctct taccactatt aatcttggag ctacaaagaa
                                                                     2160
cttgagacaa cagattettg aattgttggg ceceatttea atgaateatg gtgtteaett
                                                                     2220
tatggctgcc attgcatttg tgtggaatga aagaagacag aataaaacaa ccaccaggac
                                                                     2280
caaggtcatt cctgcagcca gtgaagaaca gcttttatta gtggaattgg ttcgttcaat
                                                                     2340
cagtgtcatg agagcagaaa ctgttatcca gactgtaaaa gaagttttaa agcagccacc
                                                                     2400
agccatagcc aaggacaaga aacatctttc tttggaagtc tgcatgcttc agtttttcta
                                                                     2460
tgettatatt caaagaatte cagtgeecaa tttagtggat agetgggegt caetgttgat
                                                                     2520
acttctgaaa gactctatac aactgagtct tccagctcca gggcagtttc ttatacttgg
                                                                     2580
ggttctgaat gagtttatta tgaaaaaccc tagtttggaa aataaaaaag accaaagaga
                                                                     2640
ccttcaggat gtaactcaca aaatagtgga tgcaattggt gcaattgctg gttcttctct
                                                                     2700
ggaacagaca acatggctgc gacgaaatct tgaagttaag ccttctccca aaataatggt
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agatggaacc aatttggaat ctgatgttga agatatgtta tcacctgcaa tggaaaccgc
                                                                     2820
aaacataact ccttctgtat atagtgtcca tgcattgaca ttactctctg aggttttggc
                                                                     2880
treatettitig gatatggttt tetatagtga tgaaaaggag egggttatte etttaettgt '
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aaatattatg cattatgttg tgccctacct cagaaatcac agtgcacata atgcccctag
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ccgtgatgtg gagctagaac agagagctat gcttcttaaa agattagcat ttgctatttt
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tagcagtgaa attgaccagt accagaaata tcttccagat atacaagaga gattggttga
                                                                     3360
gagteteegt ttgccacagg tgccaactet ccatteteaa gtgtteetgt ttttcagagt
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gttactttta agaatgtctc cccaacatct tacctcactc tggcctacca tgattacaga
                                                                     3480
acttgtacaa gtatttttac tgatggagca ggaactcact gctgatgaag atatttcacg
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gacticaggg ccctctgtgg ctggtctgga gacaacgtac acaggaggta atqqcttctc
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                                                                     3720
tattccagaa gcctcagatg attcaggttt ggaagtcaga aggcagggta tacatcaacg
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agaatttaaa ccttacgtgg tacgactagc aaaacttctt cggaaaagag caaagaaaaa
                                                                     3840
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                                                                     3900
catctgcacc gtgcgcagta tggagcagct cctgccgttc ttcaatgtgc tcagtcaagt
                                                                     3960
cttcaacage aaagtcacaa geegatgtgg aggacaetca gggagteeta teetetaete
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aaatgeette eetaataagg acatgaaact ggagaaccae aaaccatgtt eeagcaaage
                                                                     4080
caggcaaaaa atagaagaga tggtagaaaa agattttctg gaagggatga taaaaacttg
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ttataattag tttttctccc acataccttc accaagagca gtgaagaata actgaaggct
                                                                     4620
ggaccatgca teettaaaag tattgcatga geateteeac eteagtatgg aagagggatg
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gacaaccccc tattcatacc totgagttcc tgatggcatt agtcatatag
                                                                     4730
```

<210> 3426

<211> 5113

<212> DNA

<213> Homo sapiens

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<220>
<221> misc_feature
<222> (5114)...(1526)
<223> similar to gi5689403 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3426

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                                                                      120
aattotgtaa gocatgttta cataataaac aaaaaacatt tootacatat totgtotott
                                                                      180
ctgactttta acgattaaag tatttatctt gggctggcaa gttaccctga ccctaaccat
                                                                     ~ 240
taagtacaaa cagggcattg tacacccatt ctaaaagctg gaatcaaaga ataatgttag
                                                                      300
aagtatttgc aggatttatc caaagaaatg tttagcagac aaatgcaata gaaaaaaatc
                                                                      360
aagcatttcc caaaatggtg tttgtattag aaagttttaa acttttgtct tcattgtaaa
                                                                      420
ggtatcactt tattttattt ttaaaaggcc atgattaacc atttaataac ttacatacct
                                                                      480
ttacaaaaat aaaactaaca gcttgctggg cacaaaattt actcaaaatc tttctgtatt
                                                                      540
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aaagcctgaa cagtgtaatt atttaatctg atgttttaaa ttatacttga tataaaaaaa
                                                                      660
aagtctaccc aaaccatcac caaaatttca attcaatcta atgtagaaga aacctgagtt
                                                                      720
tggatgtaga aataattcat tcaattttt ttctgacatc atacatcatg ccttcaacca
                                                                      780
aaatagaagt gaagcttcaa acaggactct atggctttat ctgaattttc tgagtattaa
                                                                      840
gtaaatetta aatttaaage agetgttgga ggttaaatgt teteaaagea atgtaaaeta
                                                                      900
gttataaaat gtctcatcaa agacatcagc agctcttgtg agtcacatga aattaacaat
                                                                      960
gaaagaagga tcatcagtta tactgtacac tgagagtaca taaaacactt gtgcctcacc
                                                                     1020
tctagtatca aagccatctt catatattcc ttttataaga atattgatat gtattcttta
                                                                     1080
tgaacttcag gctcattcct tttgttaagc atgtatttac tggctgtata tagtatatgc
                                                                     1140
attgaattte ceatgaettg aaataaetat agateaaaga tetatgeaaa tacaaattae
                                                                     1200
aaacatgtag attacaagaa atccgaggtg atagtttatg aatctggatt tgccctttta
                                                                     1260
taacttcact tcaaatagaa acatcttgta ccctcaagtc caggcaaaaa tccaatttta
                                                                     1320
aaatctcatt cttaaccttt gaaagtagag cctttggaaa cagaatgaac ttcactttaa
                                                                     1380
agcactgcct ttaagaactg taacatctat tttccagaga tgtgacccag gaaacaattc
                                                                     1440
atcaatagtt tatccattcc actggcaaaa gttttaacaa ttctgatgat ttcatcatat
                                                                     1500
gtgcagtgaa taccatccgt atcatttcac aacaggatca gcagacacag tgctgtcaga
                                                                     1560
caggicteca tigetigitt tagtitette tieettetet tiettiett ggittiette
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agccgcagtc ttgtctgctc tgaagaaaat tcttgcactg ctcagtgaga aatacagcaa
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                                                                     1860
caaaagcttt agaatgtaag ccacacccat ggcaaagcca tcatcagtaa aggcagctcc
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aattttattt tttttattta atttttcctt gcaactaatg gaatgctcta caaagttgag
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ggtcagaggg ggaacaatta tatagaaatt tcggagatgt atattctttg gccttcgaaa
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gtgtgtgatc actgaggact gaatccaaat gccttgctgc ttttaatgtt tcttctgcaa
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gaccttette ttttactagt tetteaaaat ttacaatate tteaagatea ggaacaaate
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taatggcatt gctgctacaa tgaagaccac cagatcttat cattcgtaca tagcccatag
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tgtgttcatc atacataaat tggctaaata tatagaactt ctttttcaaa aactggtagg
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tgaaattaac agttgtattc ataattcccg tgccatgtgt tcgaattgaa ttagcaatat
                                                                     2580
geegaatatt aatagtatte aaatgettgt tattgettgt tegtteaata aaaatetgat
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tgttgagatt atagaggtat cgggacacaa atatatgaat gtttctcata atttctaaaa
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catcaaggcc ctgttccaaa gtctgactgg gaagatgtgc ctctgtcata accagtccat
                                                                    2760
aacgctgagt agctaagttt ctcatctcac tataagtggc ccagtcatga agggctacag
                                                                    2820
```

```
ttgttagatt gtagaaagtc ttgtctaggt agtgagttac gtaagcccga atgtcaatga
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aacgattgaa aaaccgaatt ggattcagag agaaaaaaag agccaggtct ttcatgccaa
                                                                     2940
ctttgaaagg gtttcggtca tccagcttta aatgagtatg cacagaaagt cgcagatctt
                                                                     3000
tctctatttc tttgcataat ttgtccagca aatgctcatt taaaatttcc ataatttcct
                                                                     3060
tgtcatagca atccagaagt atctcatagg actctaaatg ccttgcatgc atcatagcag
                                                                     3120
gtacacagtc gcgcaaagca ctgaacatgt aatgtaatct ggctgcatca acagcatttt
                                                                     3180
catatacatc atctaaataa attgggaaga cagctcgatg ccagtataaa aaacaacagt
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cacattgtgt ttggactcgt tctctaagtt cactaataag atccagtttt ttcatgacta
                                                                     3300
cttgaagtgg aaagagttet teatetttaa atgtttteat ttgtgtgeea acaettagtg
                                                                     3360
ccaaagaaac aataagtcgc cgttgctttg tgcttggtcc atttagagtg ttttcagcca
                                                                     3420
aaactagagc agagagcaca tcaagacgct gttcgctgta ttttttgtca gaaatcactc
                                                                     3480
ttttcttggc cacagaaata gaatgaagag cctgatgttg aaggtgctgt gttatatgtg
                                                                     3540
aaactgaatc agccacaacc atgcttctcc tgtagaacat atgctctatt gccttgagaa
                                                                     3600
gttcaacaag cctgcacaat gccttaactg aggttttggt cattggcttt tgcatggaca
                                                                     3660
tgtagagatt cattgtggtt ttaataatgg tactaatact atatgcatac aagaagccct
                                                                     3720
gtataaaaac attacatcta ttggtgagat cttcagcaaa tttatccatt ctctgctctt
                                                                     3780
tagacaaaat agattccatt ttcatcatcc atgagctcac aaagacgtag taagactgta
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catctttggt aagtgattga gctttctgtt gtagaaaagt atccctgtgt attttaatgg
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cttgaagact ttttctgtct agcagtttgg cagctgctgg tattttctgg atcagaaaat
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tatcaggaaa ccaaataata ttagcagtta gagtgatggc tggtaccttc ttacaaatgt
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ccaataaaga cttataaaac tttttatcaa tagttcgaaa aatctgaaag tgcaatacaa
                                                                     4080
agagtccaca aattccaaca tacttgtctc tctggtcaat ttcagaaggt tctccaagtt
                                                                     4140
tggcttctac atttgcaaaa attgaccgaa tactatgtgc aaattcctca gcaaaagtac
                                                                     4200
tattttttga cacagatact cctccattga gagaatcaaa ttgttgttct atacaggcct
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ggaatatcat tccatccagt aattgccctt ctagcttcag caagaacttt tcaaatggct
                                                                     4320
ttaatttttc ttcctgaatt ccaaattttg aaggattgtg atggacagat ttcagtaacc
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ttttgtacat agtccagtgg tctttcagtg tgatatgatt atcaataatt tcatccaggg
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tgagcaaaac tgttagcagt tctcccaagt gctcatacat agtctgaaaa tgaactccag
                                                                     4500
ttgtctctat aattttgggt gcaatcttgt tactgatata gagggcagcc aactggtgga
                                                                     4560
ctacgttcat caccacttca tagcacctcg taacaaagca agacagttcc tgtaagaatg
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aaataaatct ccccatttga atttggcaat caccttccac catgctggca tctgtagctc
                                                                     4680
cttctccata aaacaagaga ccattgtaaa atttagtttc agcctcatat tttaatttct
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tgatttcaca acaaagtgca gcataaacag tgatgacttt gtttaagacc ttgttttcag
                                                                     4800
tetttatgag ttecaaaaga gaggaetgtt cataaggeaa aagetttaat getataggat
                                                                     4860
caagattgaa atcccaaaca tctccaattg agtcatccag agcgtcctca attcttctca
                                                                     4920
gttgagaggt atactcctca agaaatttcc cataattctt aagttggact tcggcatgaa
                                                                     4980
ttttctgcga gccgtcgtca acgcggtcaa actcccagtc cggggacaga gtctccaccg
                                                                     5040
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tcaccccage tac
                                                                     5113
```

```
<210> 3427
<211> 5195
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3795)
<223> similar to gi3327166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

2640

2700

2760

2820

2880

3000

3060

3120

3180

3240

3300

2940

```
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                                                                     3360
ecccaageca aagcaggegg agacacac eteggaaaag eeccacagga gagecaggtg
                                                                     3420
gtggtggagg ggggcagcgg cgagggacag ggctcaccct cccagctgct gtctgacgat
                                                                     3480
gaaaccaaag acgacatgtc catgtcctcc tactcggtgg tcagcacggg ctccctgcaa
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tgtgaagacc ttgcagacga cacggtgctg gtgggcgggg aggcctgcag ccccacaqcq
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cgcatcggcg gcaccgtcga caccgactgg tgcatctcct ttgagcagat cctggcctcc
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atcctgacgg agtccgtgct ggtgaacttc tttgagaaga gagtggacat tggactcaag
                                                                     3720
atcaaggacc aaaagaaagt ggagagacag ttcagcaccg ccagtgacca tgagcagcct
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tagacagatt ccctgggcct gcatctcctg gcgccggctg cttctgggcc caggaagagg
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ctgtggetee cacetteett acacetggtg ggageeegee tegeaceage tgeacetgee
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tagcattaga ggctctcaga tctgcccttg cttgcctcat acctctgtgc tccacactgc
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ggccaggcca gctgagtccc tccatccgtg gatgctttcc tgcagctatg tgqtatqqqq
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gtcattcctg cctcttggca ccaggttggg gggcatgtgc ttgttgggca ccaaagtgat
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ggaaccetca ggtgctetee gggageetga aceteetgae tgaggaacat gggcagaaca
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tgtttattgc acagagtggg cgctgcgcac aggcgtggct gtacacgtgc tctcagctca
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tcatcctttc cagtaacttt aaaaaaacat ccctcaggtc ctgatatatt tccttggatt
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cattteactt ggetagaaat tacactgtge teaatgeett aataaateee tgaaagaaat
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aaaaaccact gtgtgcaatg cettgetgtg geeeccaace actgettagg eeteecaact
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tetececagg ccaagtatgg ggeeetgget gtgttetgga agtteaagae acttagteet
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gatacagcag ttaccccctt atccacaggg gatacagtgg atatctaaaa ccagacccc
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agtggatgtc taaaaccaca gataataaca aaccttatac atactgtttt ttcctatgca
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tacatacctg tgattaagtt tatgaattag gcaccttaag agattgacaa caataactaa
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taataaaatg taacggttat actgtaaaaa aaaaa
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```

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<211> 2892
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (326)...(2892)
<223> similar to gi4322670 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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<210> 3428

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<400> 3428

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ttgccctcat ctacacaacc catacaattg gatctcagac cactcaagat ggactcgatt 180
ggttgatatc aacctagtac ggtgccatgc tttgaagctg gactcttttg gccagtttat tgaattatta cccagcctag agtttattc actggatcag atgtttcgtg aaccacccaa 300
```

```
gggttgtgct cgagttggtc tgagtgcagg cacaggaatt ggtgtttcat cagctcttgt
                                                                      360
tagcaaccag aactccaaca atgacgataa taatgcccag aataacaatg ccaacatcca
                                                                      420
cgacaacaat caccatcatc cagatgactc agacgaggag aatgactttc ggcaagatct
                                                                      480
gcagccagga gagcagcagt ttgcagctga cgcattaaat gagatggaag acatcgtcca
                                                                      540
agaagatgga gaggtggtgg ccgagagtgg aaataatact ccagctcaca gccaggcaat
                                                                      600
tattcctgtg gatgttgatg aggaacaagc aggacccagt ggtcttcagc gtgtagtaaa
                                                                      660
accaacctca attactgttc atgattcaga gagtgatgat gaagaagata gtctagaact
                                                                      720
ccaagaagtc tggattccta agaacggtac tcggcgttac tctgaacgtg aagaaaaaac
                                                                      780
tggagagtca gtgcagtcca gagaattgtc agtaagtgga aaaggcaaga ctccacttcg
                                                                      840
aaagaggtac aactcccatc agatgggcca gtcgaagcag tttcccctcg aggaaagcag
                                                                      900
ctgtgagaaa ggctgtcagg tcaccagtga gcagatcaaa gccgatatga aagcagctag
                                                                      960
ggatatteet gaaaagaaaa aaaacaagga tgtttateee agetgeagea geaceacege
                                                                     1020
cagcacagtg ggaaactcca gctcacacaa cactgcttct caaagccccg actttgtaag
                                                                     1080
gacggtgaac agcggcggct cttccgagcc tagccctaca gaagtggatg tgtccaggca
                                                                     1140
gtgtgcctgc tcccccggtg ggtcagagga ctctgaggcc atggaggagg gagatgcaga
                                                                     1200
gagttetgte tgccccagat getgetgtca caggecccag gaatcccaaa ggagaactag
                                                                     1260
caggtgttct gatgaggaac gtccttcaac cagccgagcc tgtgttgtga atggcccgga
                                                                     1320
tggtacgaga teegeetttt eetttaggae tetgeeacaa ggggggtett caggeecage
                                                                     1380
acatgatgag aggactaatg ggagtggctc tggggctaca ggtgaggaca ggaggggag
                                                                     1440
ctcccagcct gagagttgtg acgtgcagtc taatgaagac taccctcgga ggcccctaac
                                                                     1500
cagggccagg agcagactgt cccatgtact gctggtatct gagtcagaag tagccaaaac
                                                                     1560
aaagccacgt cacgccatga aacggaagcg gacagcagat aaatccacta gtacaagtga
                                                                     1620
tectgtgate gaggatgace atgtgcaggt tettgtatta aaatecaaga atettgttgg
                                                                     1680
agtcactatg accaattgtg gaatcacaga tctagtgcta aaagactgtc caaagatgat
                                                                     1740
gttcatccat gctaccaggt gcagggtact aaaacattta aaggtagaaa atgcaccaat
                                                                     1800
tgtaaaccga tttgactatg cacagtgcaa gaaactgaac atggatcagg tactagacca
                                                                     1860
gatactaaga atgccacccg agagaaaccg catcatatac ctacgcccaa tgcagcaggt
                                                                     1920
ggacacteta aetttggage agaagetatt tagtggteee taeceetate acatetgtat
                                                                     1980
tatccatgaa ttcagtaacc ctcccaatgt ccggaataag gtgcgcattc gcagctggat
                                                                     2040
ggacactata gcaaacatca atcaagagct cattaaatat gaattettee etgaagecae
                                                                     2100
tcgaagtgaa gaagacttaa agaaataccc caagtacccc tgggggagag aaatctatac
                                                                     2160
tttagaaggt gttgtggatg gageteeata ttecatgatt tetgaettee ettggetgag
                                                                     2220
gtcattacga gctgcagagc ccaacagctt cgctcgatac gactttgaag acgatgaaga
                                                                     2280
aagcactatc tatgctccta gaaggaaagg acagctgtct gcagacatct gtatggaaac
                                                                     2340
aataggagag gaaatttcag agatgcgtca gatgaagaag ggtgtatttc agcgagtagt
                                                                     2400
ggcaattttt atccactatt gtgatgtcaa tggagagcca gttgaagatg actacattta
                                                                     2460
attggtccct cctcctttcc agctattttg tcagaaagca agtagggcca tccagctgcc
                                                                     2520
agagtgetee acagggaett gaggeatgea gttgggaggt cetggetegg tttgetatat
                                                                     2580
agggaatata taaggaacat cgaaattgta tacaaagatt tgtacataaa aaatatacaa
                                                                     2640
agacgettee taaagtacca actttatate atatggttta taccatttaa tttaaaaatt
                                                                     2700
ccatttttaa ggaagacaga taatttgaaa aacttttggt ttttcttgac ttaattcatg
                                                                     2760
aaagtatcat tttttgactg agtctccatt tacttcattc ttaaatggat taattgtcca
                                                                     2820
teceetttaa ateetgtgee tttttettee tggagegaeg ggttttgagt agaeetggtt
                                                                     2880
gaagagtgaa aa,
                                                                     2892
```

```
<210> 3429
<211> 1068
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature <222> (1067)...(216) <223> similar to gi5915916 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3429
ttttttttt ttaaagtcaa gtaaatttaa tctgtaacta tgaaatgtct aggttagcag
                                                                       60
caattatgga tgcccaaaga ctgggcaaaa tttgtccccc gaaggcatcc tgagggccac
                                                                      120
aaaggctccc ctcagttcac aaaggtagct ggcaggatgt tagctttgcg ctcagcttca
                                                                      180
atgcagtact tttcggaaag gccaggggct ctcagctttt caagcttttt cctcttgatc
                                                                      240
tcatcgatgc gctcacggcg tttctgggcc tcctctttga ggcgccggcc ctcctcaaag
                                                                      300
gtggcaatcc ggttctgcac ttccttctgc tggttctcgc gcacctggcg ccggagctca
                                                                      360
ttggcatgct gtaagcgccc tgtggccttt ttctcctcct ccagccgctc cttctcaatc
                                                                      420
tgttctctct gagcccgaag aatcctctcg aactcatccc ggtcccgttg cacctgaaca
                                                                      480
gccagagegt gctccttgaa agccacctgt tegageegae tttttegeag eteageetet
                                                                      540
gtttccatct tcttccgcgc attttccttt tcctttctgc gccactctct gtctgcaacc
                                                                      600
tectggttge gettggeeeg caaggeatee tgttetgeet ggtaateetg ggeettetee
                                                                      660
tgcatggccc tcaagcgtgc gatctccttc tctttctccc tccggattct ctcctgctca
                                                                      720
gcctcaaact ctgcttctcg agccatcttc ttcttggtaa actccatcac catctggtct
                                                                      780
gecagettet cetgagecag gagttetget ttetgtttet ggtttteate attgatgege
                                                                      840
ttaatctcag cttgcatctt cagtttttgt tgctgccttc gttccatgtc ctttagatct
                                                                      900
tectettgga getgttecat atattecage atetgeteet teteetgete eegetgetea
                                                                      960
gcaagcageg ategeteete etggttettt tecatetgtt ecaeaatttg eegeetteet
                                                                     1020
ctaattettt ceteecteet etteetetee agtteeegga egegtggg
                                                                     1068
```

```
<210> 3430
<211> 2388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2389)
<223> n = a/t,c or g

<220>
<221> misc_feature
<222> (1677)...(857)
<223> similar to gi4218005 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cgacttttt ttttcacac ttgaatgctg ttactattta ttgacatcaa aacgaaacaa 60 gctgagacta aaagttgcta tttaacagga atagacactg gtgcagtttc cttcctggag 120 agggtatgca ctcagatcat gagacctaag atcaaacaca ctggattgtc aaagagtcaa 180 acaaggacta caattttaac ctccttaata gaaaagatgc tgatgacaaa acacgaagtt 240 taaaaatatt ctttacgcta agctcatata agcaaacaaa aaactaaaac taatcctaaa 300 actttaggac actggataca gaagtaacat aactattaa atttttgtat caacgaaagt 360 gtgttctatc cttcactgta cctgtactac aaggacatgc ttgttgctc tacactaccc 420
```

```
aatgtcaaca cttatcatca acaatacaat agaattagat cggaacaagg cttcaaagcg
                                                                      480
actictgotice acceanatte againatten attenggatg anchaeget tittgattita
                                                                      540
gaaccagete ttaettttet etegtgteat atgtgatgaa gteeteaett gacaatteee
                                                                      600:
cetgeaaatt geaatgeatg teettgeegt cacettttte tgacaettta aaattaattt
                                                                      660
gtagaaattg caaaagcaat gaaattgtac ttccaattct gaacctctga tcagattcct
                                                                      720
getttgacac aagaettact cetetgeagt gtaceceace ageacagegg etecetttet
                                                                      780
ctctattctt tgccctgaag gcacctctgg attgcttaac gtgtgctctt tggctgccta
                                                                      840
gacagtcagg acacctaagg ccatctggac ttatcactcc tctcctcctt cttttctatq
                                                                      900
gctaatacca ctttcctgct tcctttctgc tgctgaatct ccagacttgg tgctgtcatc
                                                                      960
agggggacag agtcgatttc ggcttcgagc tcctggttgg taaagctgca tcgctggacg
                                                                     1020
atcottgttt cttattcgat ctctcttgac cacttcttct ttcttttcag ttttttctga
                                                                     1080
gctgcctatt gattctgtac tttcagcctt ctttccttta tcccgaagtg tgtctttctc
                                                                     1140
ttttttcatt tcttcttctt ttctcttaaa agtcttctct ttctcatagc gctccttctg
                                                                     1200
cetaeggege tettettett geegetteag cetetetett tetegaagta tgegeteetg
                                                                     1260
atctcgttca tattcccgtt ccctctccct atagtctctg ccgctctcat cttcaggtct
                                                                     1320
ctttggtttt tcatctttaa gttcgctatc agaacgcttg ggcaatgtac aactttgccc
                                                                     1380
actggctctt tcatcactga gattctcttt gtccaatttc ttggcttttt ctcttttgtc
                                                                     1440
caattetttt teateteett tttetggett ettgageage ttaatetttg gtteateett
                                                                     1500
taatttgtcc ctttctggaa ttctgtctat cttctttagc ttttctatat ctttccttt
                                                                     1560
tegittetet tettetttee attteeteet etettettet etttgiettt ttetttetat
                                                                     1620
tteteteete eteetttett etetettte tteteteatt etetgettgt tttteaggaa
                                                                     1680
gctcaaaagt ggggttgtct ttttagctat taattctcta ttttttgctt ctatttcctc
                                                                     1740
tagcagtgtc tctggagtag atgtcatttt ctcattatct gtggcataac tttccaaaaa
                                                                     1800
ctttctatat tctggatcat catcgatagt cccgactttg gtatctcttt tcttagtctt
                                                                     1860
cttttttgca gctttttgaa aaggtgcaaa ttctactata gcgggatatt cctgaccttt
                                                                     1920
attgtcaagg aatacataac catcaaagcg atccctgaac aaaataatgt cctcttggtt
                                                                     1980
tttaaagttg atgtatgctc tggcatacat atgaggatac aaactcgtat cattagaaaa
                                                                     2040
aaactcaaaa taatcatgot caggoatagg ttgaagatgt tootgaagot qotoottqqt
                                                                     2100
caaagtggga ggtaatette gaattaceae ettgeteage gettetttet teteettgtt
                                                                     2160
gegateetge ttatetteee cettggaget gteeceegag gteecaceae egetgeeegt
                                                                     2220
ggccccggcg ggggttaaca gggttactcg cttctcctta ggcctgtgct ccttctctc
                                                                     2280
cttcatggct acgtcccccg ctgaagcggc ttggccggaa cggggttacc ccgggcacaa
                                                                     2340
acgacgaaat cgtcgacccg gtnnaacggc ccagtactnn ngaggtca
                                                                     2388
```

```
<210> 3431
<211> 3239
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3240)...(270)
<223> similar to gi5817132 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3431
ttttttttt ttcacaagaa cagggtggtt tattatttca atagcaaaga gctgaaaaat ggcgggtccc ataaaggagc agaacctgac ccagagcctg cagtacattt ccacccaca ggggtgcagg ctgggccaga cagggccaaa ggcagcagaa atgggagtaa gagactgtgc cactgagaa gctctgctgg gttgtgggca ggtgggcatg agatgatgat gatgtagtgt 240
```

	aaggaccagg	taggcaaaac	ctgttcaggt	cttgttgagt	gtccagagtg	gatccagaag	300
	gctgaggggg	tcgtcagagg	gccgggtggc	ccgcagccct	tgcccgttat	gggcctgcag	360
	aaagttatgc	ttgctcatcc	gctgtttgcc	ccgcagggag	ctgtccaggg	agaaggcctc	420
	tggggtcaag	gaggccagca	attccaggga	ggaggagggg	ggccccgagc	tgggggcttc	480
	aggcactggc	ggctcctcct	taggctgggg	agcctcaggt	agtggggagg	aaaggggggg	540
	tggggaggaa	gatgggattg	gggtagactc	tgggaggctg	gctggcggga	ggcctggggg	600
	ctctgcaggg	cctggcaagc	tggcaaccgg	ggactccaac	ccccaggag	gccgaatgct	660
	gagcttggca	atggtggcct	ggatggagct	gatgggcaca	tccccaccga	ggaccaggtc	720
			ggttcttctg				780
	tggaggaggc	acaccatggc	gctgcaggac	ctgctccacg	tgtctcacca	ctgcctcata	840
			tctcctgcag				900
			ggattccgtt				960
			tgcggcccac				1020
			ggtaatgtgc				1080
			ctaactcagg				1140
			ggaactgcag				. 1200
			ccaggctcag				1260
			ctttttgctt				1320
			catggaccat				1380
			gcggggggca				1440
	attgatgtag	tcatccttgc	ctgagcgcag	caccacacgg	ttactgtcat	agggcatgac	1500
	atcctggtgc	cggttcttca	gtgagtagca	gcgggcaatg	gcgatggaac	ggcctcgggc	1560
	atcatgttcc	tgcgcatctt	gcagctctcg	ccagacagtg	tccagagctc	ccacatecce	1620
	cagctgaccc	cgaaaggcct	ccagctcctg	ctgcaactgc	cgcagcctct	caggatgttc-	1680
	ataggggtcc	cgctcaatca	gccgcagggc	ctgcggccga	cgaccctcag	ctgcatccac	1740
	cttggtgggc	tgcagcaggg	gctgcccacc	cccaggagac	tgagtgccgc	catgctggct	1800
	ctccgggctg	gaggagagca	ggtctgcagc	tgcggcgcct	cggcgcaggc	aagggggtgg	1860
-			ggggtaccgg				1920
	caccaggtgg	ggactagggg	tggactggcc	agcagacgag	ggccctcgaa	tggtaagagg	1980
	ggctgcctgg	gggcccatgg	gtctggtaga	aggggcagga	ccatatgcca	gtgggggatg	2040
	gggaggctga	gggggcccag	ggctggggaa	aggcagagcc	cctgagtggg	ctggcagagg	2100
	gtcttgagcg	ggacctgggt	agagctgggt	gtgtaagggg	gggtggcggc	tgcccccagg	2160
	accccagget	gaggggcata	ggggtagggg	gattgtgggg	gtaggagtcc	tggggcctgg	2220
	ggtgggaaga	gatgtggatg	ctggagtgga	aggggctgct	gtgggggctg	aggcccaaac	2280
	gcttgtgaag	gatggggctg	aggatggggc	tggggctggg	gcccaatcct	tggggctgga	2340
	aaacctgtgg	ggatcccaga	agagaagtgg	tgctgtgctg	ggatgggttg	cttagcccct	2400
	gcagggtagg	tgtaaggcgt	gggcagtggc	tgcggtgggg	gcacagggaa	gcagggcggg	2460
	ggaggagcag	gggtggggtt	tggccgtggg	gctgtgtggc	tggggatggg	cgcctggatg	2520
	ctatctactg	tggtggtggc	tggccgaacc	gccatggcca	actcggggcc	tgagaattga	2580
	ggaggtgggg	ccgagggag	acctgcaact	ggtggggccg	gccctacccc	cacataggga	2640
	ctgctcacca	cgccatgctg	tggggaggat	cggggcacaa	ggcccagctc	cggtgtgtag	2700
	gcaggggctg	ggtagagggc	aggcccaggt	gctacgggca	ttgcatgggg	ccctggggcc	2760
	ctgggctgta	tcagctgggt	ggggcccgag	taggtaccag	ggggcaaggg	gcctgagaga	2820
	tagtggggtc	ctgggcctgt	ggagctgggg	aaggggctgg	gaggaaagtg	gagcggggtg	2880
	gcacttccca	ggaaggtgtc	aggcagtcgt	gggccagcca	ccatgtcagg	ggggaggctg	2940
	cgcagctcct	caggggggtc	teetgettee	actgcctcac	teteeteect	gcggggcagc	3000
	agcggctttg	gggctgtggg	ccgtggcggc	ggcttcttct	tcagctccct	gtccaggagc	3060
	rgctggcggg	cagcctcgcg	ggcctggcag	gtggactgcg	tgcgctccag	cagagcagcc	3120
	accttgctct	ccagatctgc	gtagaagtcc	ctgccctcct	gcgacttctt	catcaggtcc	3180
	ccataggett	catacgaggc	caccagggtc	tgcagcgtgg	agttccactt	ttggtcccc	3239
	• •					•	

<210> 3432 <211> 1539

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1051)...(215)
<223> similar to gi598332 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3432
ttttttttt ttgaaaatac cacattaaag atatatttat atacagaaaa tggcagcaat
                                                                       60 '
gccaataaaa ttttataatt taaaaaagtt acttgttaaa ggcagatttc ataagttgtg
                                                                      120
tttacaatca tccatttaat catctccaaa aaaaggatga atttattatt ttaaactaac
                                                                      180
attetgtaag ttaaagagaa taateaagtt gteteatgga etggaaggtg aettattaat
                                                                      240
tecettteat ttecaaacet cateaageag teactacatt tatgaggeaa gteagetgaa
                                                                      300
tgcttgaaat ctagatgaat tttaagatct tcaatttgtc ctgttgaata ttcccaatat
                                                                      360
tgacataaat aaatcccttc agataaatgt gaatttaaat gcttggcaat attctagcat
                                                                      420
acttgaaaag cctttcccac agtcatcaca aacatgagga aaaatttttg tatgttcaat
                                                                      480
agcaacatge etgttaacat ttgtgtgaag tetaeteega aaaccacata ettgacatae
                                                                      540
aaagaagttt ttacatttgt caaaggtaat tttgcttaag aggctatact gtccatgttc
                                                                      600:
accattgtta tacttatcac ttaactctat taatttacat gcatgctcat ttaccacatg
                                                                      660
gctatgcaag tcttctggat cattagtttc atgttcacag aactgacaca agtactgttc
                                                                      720
atcacagetg tgeteetgga aatgtaggta gagtteaetg ettgaggaga aetgtacate
                                                                      780
acactgttca caccaataga ggtgatcact aaaatgggtg tctgcaatgt gctggctgag
                                                                      840
gttctcaaaa attactgtct tataatcaca gtatttacaa atgtagggat cctcttcatg
                                                                      900
cagtttggca tgttctatca gaagcatatt ggtagagaaa ctttccttgc atactcgaca
                                                                      960
cacatttgaa tcagtacgtt tatgcttcag gatcatatgc tgctttaagt cagaaaaata
                                                                     1020
tttgctgtta aactcacaaa gttcacattt atagaggcca ctgctattag ctctcagtaa
                                                                     1080
aggccatttc tgctgggcag tcacattcaa agcttggctc ttgtcaagaa ttttacaaag
                                                                     1140
tttagctggc ggttcttcat cagtttggtc ttggagactc tcagaggaat tgttttctgt
                                                                    .1200
ctctatatea taateeteag aaategeatg caettetaca geaattggaa catetteage
                                                                     1260
agtgtgaact totataggac totoctottg ggtttgctgg ttgactgatt caggtgagtc
                                                                     1320
acactettea teacaaatta caatateage agatttttet gtagaaaagg cagtgtggte
                                                                     1380
tagaatteta agtacaggae tgggaaccag gtagttetga tttetgttte tggeettgat
                                                                     1440
tocatotgoa aattttggoa agtcatttga caacaaagat gatgattctg ataccgagac
                                                                     1500
gtcaaatgac ttgccaaaat attttaaatc tggctgtct
                                                                     1539
```

```
<210> 3433
<211> 4936
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3978)
<223> similar to gi3327082 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3433 ggttcgcttc ggcgtccgcc gtctccgcag ctgcctcctc ttcctccttc gccaccgccg 60 ccacegoege egeegeeege ageacegoag ecceteeege categoegee geeggegee 120 ggctcagccc cggccccggc tcggggctcc gggggcggcc gaggctctgc ttccacccgg 180 ggccgccgcc actgctgccg ctgctgctgc tgttcctgct cctgctgccg ccgccgccgc 240 tgctggccgg cgccaccgcc gctgcctcgc gggagcccga cagcccgtgc cggctgaaga 300 ccgtcacggt gtccacactg cccgcctgc gggagagcga catcggctgg agcggcgcc 360 gcgccggggc cggggctggg accggggccg gagccgccgc cgccgccgcg tccccgggct 420 etectggete tgeeggeace geegeegagt egegeeteet getetttgtg egtaacgage 480 tgccggggcg catcgcggtg caggacgacc tggacaacac cgagctgccc ttcttcaccc 540 tggagatgtc tggcacagcg gcggacatct cgctggtgca ctggagacag cagtggctgg 600 agaatggcac cttgtacttc cacgtctcca tgagcagctc cgggcagctg gcccaagcca 660 ccgccccac tctccaggag ccctcggaga ttgttgagga gcagatgcac atcctccaca 720 tttctgtgat gggtggcctc atcgcgctgc tgctgctgct gctggtgttc accgtggcgc 780 tgtacgecca gegaegttgg cagaagegte geegeateee eeagaagage geaageacag 840 aagccactca tgagatccac tacatcccat ctgtgctgct gggtccccag gcgcgggaga 900 getteegtte ateceggetg caaacecaca atteegteat tggegtgeec ateegggaga 🕒 960 ctcccatcct ggatgactat gactgtgagg aggatgagga gccacctagg cgggccaacc 1020 atgtctcccg cgaggacgag tttggcagcc aggtgaccca cactctggac agtctgggac 1080 atccagggga agagaaggtg gactttgaga agaaaggagg aatcagcttt gggagagcca 1140 aggggacgtc gggctcagag gcagacgatg aaactcagct gacattctac acggagcagt 1200 accycaytey ceyceycaye aaagytttye tyaaaayeee aytyaacaay acayeeetya 1260 cactgattgc tgtgagttcc tgcatcctgg ccatggtgtg tggcagccag atgtcttgtc 1320 cactcactgt gaaggtgact ctgcatgtgc ccgagcactt catagcagat ggaagcagct 1380 tcgtggtgag tgaagggagc tacctggaca tctccgactg gttaaacccg gccaagcttt 1440 ccctgtatta ccagatcaat gccacctccc catgggtgag ggacctctgt ggacaaagga 1500 cgacagatgc ctgtgagcag ctctgcgacc cagaaaccgg agagtgcagc tgtcatgaag 1560 gctatgcccc tgaccctgtt cacagacacc tgtgtgtgcg cagtgactgg ggacagagtg 1620 aaggacettg geeetacaeg acaettgaga ggggetatga tetggtgaea ggggageaag 1680 cccctgaaaa gattctcagg tctactttca gcttgggcca aggcctctgg cttcctgtca 1740 gcaaaagett tgtggtteeg cetgtggage tgtccatcaa ceceetggge cagetgcaag 1800 accgatgtgc tcgtcacgga agaccctgca gatgtcaggg aagaagcgat gctgtccaca 1860 tactttgaaa ccatcaatga cctgctgtct tccttcgggc cagttcgtga ctgctctcgg 1920 aacaatgggg getgeacteg caactteaag tgtgtgtetg aeeggeaggt ggatteeteg 1980 ggatgtgtgt gccctgagga gctgaaaccc atgaaggatg gctctggctg ctacgaccac 2040 tccaaaggca ttgactgctc tgatggcttt aatggcggct gtgagcagct gtgcctgcag 2100 cagacgetge ceetgeeeta egatgeeact tegageacea tetteatgtt etgeggttge 2160 gtggaggagt acaaactggc tcctgatgga aaatcctgct taatgctctc agatgtctgc 2220 gagggcccca agtgcctaaa acctgactcc aaattcaatg ataccctctt tggagagatg 2280 ctacatggtt acaacaaccg gacccagcat gtgaaccaag gccaagtctt ccagatgacc 2340 tttagggaga acaacttcat caaggacttt ccccagctgg ccgatgggct gttggtgatc 2400 ccgctgccgg tggaggagca gtgccggggg gtcctctccg agccccttcc ggacctccaa 2460 ctgctcactg gagatatcag gtatgatgag gccatgggtt accccatggt gcagcagtgg 2520 cgggtccgga gcaacctcta ccgtgtgaag ctcagcacca tcaccctcgc agcaggcttc 2580 actaatgttc tcaagatect gaccaaggag agcagteggg aggagetget gteetteate 2640 cagcactatg geteceacta categoagag gecetetatg geteagaget cacetgeate 2700 atccactttc ccagcaagaa ggtccagcag cagctgtggc tccagtatca gaaagagacc 2760 acagagetgg gcagcaagaa ggagetcaag tecatgeeet teatcaceta cetetcaggt 2820 ttgctgacag cccagatgct gtcagatgac cagctcattt caggtgtgga gattcgctgt 2880 gaggagaagg ggcgctgtcc atctacctgt cacctttgcc gccggccagg caaggagcag 2940 etgagéceca caccagtget getggaaate aaccgtgtgg tgecáéttta tacceteate 3000 caagacaatg gcacaaagga ggccttcaag agtgcactga tgagttccta ctggtgctca 3060 gggaaagggg atgtgatcga tgactggtgc aggtgtgacc tcagcgcctt tgatgccaat 3120 gggctcccca actgcagccc ccttctgcag ccggtgctgc ggctgttccc caacagtggg 3180 agccctccag tactgtggtc tccttgggag tgggtgggat gtttcagcca gctatttggg 3240 gaccaaggtc ttccgattat tatttttgca gcataagaaa gtggatgaat acacagacac 3300

```
tgacctgtac acaggagaat tcctgagttt tgctgatgac ttactctctg gcctgggcac
                                                                     3360
atcttgtgta gcagctggtc gaagccatgg agaggtccct gaagtcagta tctactcagt
                                                                     3420
catcttcaag tgtctggagc ccgacggtct ctacaagttc actctgtatg ctgtggatac
                                                                     3480
acgagggagg cactcagagc taagcacggt gaccctgagg acggcctgtc cactggtaga
                                                                     3540
tgacaacaag gcagaagaaa tagctgacaa gatctacaat ctgtacaatg ggtacacaag
                                                                     3600
tggaaaggag cagcagatgg cctacaacac actgatggag gtctcagcct cgatgctgtt
                                                                     3660
ccgagtccag caccactaca actctcacta tgaaaagttt ggcgacttcg tctggagaag
                                                                     3720
tgaggatgag ctggggccca ggaaggccca cctgattcta cggcgactgg agagggtgag
                                                                     3780
tagecaetge tecageetee tgeggagtge etacatecag ageegegtgg aaacagtgee
                                                                     3840
ctatcttttc tgccgcagcg aggaggtccg gcctgcaggc atggtgtggt atagcatcct
                                                                     3900
caaggacacc aaaatcacgt gtgaggagaa gatggtgtca atggcccgaa acacgtacgg
                                                                     3960
ggagtccaag ggccggtgag ggagggtatt gccctccgtg agcacagaga ctctccatgg
                                                                     4020
gaggggage agtattetee tggateetgg ggeetgggtg ggetggggga cagetgagga
                                                                     4080
tgggcctagc agatgaagct tgccagcaag gccaatagca aacggtttct cctgtggata
                                                                     4140
gtggacagag acctttgtaa ccaatggaat tattcatttt tctctatctt ttatttttc
                                                                     4200
aaagatatta tttgactcta tcaaaagtct ctccttttta aaccttttct tatggatggc
                                                                     4260
tgtcaatccc gaggcagaag ttttcaggtg gagaccaagc ggcctttgct cttcttcctt
                                                                     4320
cttcctgcca cactctgctt tcttcctgcc atggacccct ggaggagacc tatggaggga
                                                                     4380
cagttttgac ctgaccccta gaggagacag ttttgacctc ttcagcacca ggaaggaagc
                                                                     4440
tctgaggatg gttgcagtga ggaagcatgg gtctttaagg acttctctct cttttttgct
                                                                     4500
ggacattatt gagtttgtgg gaccctgcct cttcctgcta cctgtgggtc tgcccagagt
                                                                     4560
ccctgcaggc ctgtccatgc attaaaaatt cctattgtct ctctttctgc ttgggtggta
                                                                     4620
tttcttacca agggcatgtg cttgagagac ctctgtttat tcacttattg agtatctacc
                                                                     4680
ctgtgccagt cacagagcat atgcaactaa agacagagaa gcttccttcc ctcagggaac
                                                                     4740
ttattgccca gtggaaatta tagagaagga gtctggtcat ttcaagctgt gctagaggaa
                                                                     4800
gaatggaggt tetttgeact cactgttaga geatgagaea cactggaggg etectgaaat
                                                                     4860
gcttccttga aaaagtgata cctaaaccca aaggatgagt agaaataagc cagacagaga
                                                                     4920
ggtgaaaaag atggga
                                                                     4936
```

```
<210> 3434
<211> 2290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2288)...(245)
<223> similar to gi5052554 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3434
ttttttttt ttaaaatctc agatgctgct ttatttacca aaggtgctgg cttggggctg
                                                                       60
gttctgctgg ccaagccagc ggatggctgt gggggtccca gctcagtctt ccaagggcga
                                                                      120
gactgtacag cettgetgtg gggggttggg ggcagggtte cetceegggg ceetgttggg
                                                                      180
gttcccgccc agcggcagcc agggtgggca gtgggtacca gcactgccat ctcaggaagg
                                                                      240
cactttcage ttcggggtcc ccaggaagaa ctgcaggacg cggtcggcca ggagcgccag
                                                                      300
gcagaagtcc aggagcagga cctgggcaat gaccagcttg aactccacag ggatgtccac
                                                                      360
gaggccaaac tggctgttga agtcgggcga ggagccgagg agcaggccaa tgatggccag
                                                                      420
gagtgaaact gecagaetee acaecagggg ettgtteteg ggcaggetet ceatgaaggg
                                                                      480
cgggcctttg taattgatgg cgaaggtggc catctgcatg gccatggcca tgatgtagac
                                                                      540
```

```
ggtgctgttg accaggcttg gctcaaactc cttgtacaag tccacgaact gctcctgctt
                                                                       600
ctcggggctc cgggcctggg cctcacggta caggtagaca aggctcagga agtgcacaaa
                                                                       660
gaactggagc atgacggtga ggatggtgta caggttgaag atgttgggca ggggccgttc
                                                                       720
tcgggagagg gtcttgaggg gcttggaacg ggagatgaag aggaagcagc cggccagcag
                                                                       780
cagcccctgt agggtggcct ggaagtcact gaacttgact ccctccaggt agaggacgct
                                                                       840
ctggctgtag gccaggatga gggcattgag cgccaggatc ttgaacatct gtagcgtggt
                                                                       900
caccagegtg cageggeeet gettgateae gtggeagatg caetggatgg atgagagett
                                                                       960
ggaggtgaag ggtgctgcga tgctggcatc ccccagtttc acaatgggcg tactctcgtc
                                                                     1020
ctcgaggtct cgcagcacct ggctcaggcg gtccctctgg gaggttggct gctcctcgga
                                                                     1080
999agggage cccgaccgct gcttggctgt cctggaggtg gctctgatgc cactgttgct
                                                                     1140
cagggttggg ctgtcccggg gccgccgtcg ccgctcgaca acccgctcag gggcattggc
                                                                     1200
caagagegee acaeecaegt cageatgett cagggegeee aegtegttgg tgecateece
                                                                     1260
acacatgagg gtcacgtagc ccagctcctt caggctggtg atgacaaact ccttctgctt
                                                                     1320
gggagccaca cgggcgaaca cctgcacatg ggggatgagg cggagcagct gctgggggtc
                                                                     1380
ggtggcctgc aggtgggcca agccgtcgcc tgtgaggcac agtgcgtact ccagggccag
                                                                     1440 <sup>:</sup>
tgcctttggg gagccccggg ccaggggcag cacgatgctg ccgtcaatgg agcgccactc
                                                                     1500
gcactgccgg cctttctcgg agggaggctg caggatcagc gtgtgggcct tttcaatgaa
                                                                     1560
gtgcageteg etgggecaeg tggcatgcag tgagegggtt gteteeegtg atcatgacea
                                                                     1620
cccggtggga cgcattctgg atctcccgga tcacggcctt ggagtcagcc ttgagcgggc
                                                                     1680
aggagaccac aatgaagccg acgaacttga ggctgcactc cagggcctcc cgcttgacct
                                                                     1740
cccgggcctg ctggtgagtg aggtgtccca gctccttgta ccccagcgcc aggacgcggg
                                                                     1800
ctccttcccg ggagatctcg gtgtggatgt ggtggtagtc gggcgggcac tgggagaaca
                                                                     1860
tggagtgcag agtttcgggg gcccccttca cggccgcgat gtagcagagg tcggtggagc
                                                                     1920
ccagetttte atacgaggea ageaeggaca ttegetteag ggeaetggea aaatgaaage
                                                                     1980
gctggtgaat tttcagcccc tgagttttaa tacttcgggg gaatactttc tcatctttgg
                                                                     2040
teagegteea gteeaeggee gteageatgg cettetetag agggteaece acgagggtge
                                                                     2100
cgtcgtccag ctgcatgagc gagtggcacg aggccagggc ccggtgtgtt tctacaggga
                                                                     2160
tgctggacac tggggtcacc tccttcccgc taataggccg ggatacaccg cgcaccaccc
                                                                     2220
agetyteect gyteaacygt cocytettty teaaageaac ceaacettey acetttteag
                                                                     2280
caaaggggga
                                                                     2290
```

```
<210> 3435
<211> 3109
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3110)...(478)

<223> similar to gi2465540 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
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ttttttttt ttctgggcat ttttaatttt aatcagcatg gccagtcaaa tacaaaaagt 60

tttgggacaa aactgattta gagttgattc agttcccaag tgagacatac ttcttttgtt 120

ctcccttttg tttagataat tctgggcaga aaaatatatt caaagattct gagtaagata 180

aaacaagtaa taaggaaggt ataatctgtc atgagattag agtttaagaa accaacaaaa 240

aagggaaggt gtaatatagc atcatctctg tgtgaaaaat ataactttaa aataatacat 300

attcatagga aatgaaaat gagaaaaagg gaataataaa aaattatggc ttttagggga 360

cttaaggaaa aatagaaaac tttattttac aattctccag aaaaaaatca cttatatttt 420
```

```
gcccaaaatt accttataca gtaaattata tattaaggta gaccattaat taagcttaaa
                                                                      480
tagtggtttc aaatgttggt aaatatgtct tttagttgca aaaatttcag agacaggctg
                                                                      540
caactttatc ctgatagaag tcaaagccca gtggagaagt tctacatcac ggacccgggg
                                                                      600
caatgtgage tgtaaatett tetteaacce aaagagette tggtttacet teaggacage
                                                                      660
tetecaegtt ggtaggtegg tgagggatga taaagggtag gaeateeage caeceaggge
                                                                      720
agttttccgg tgtgtggctc ttgtttttac aactggtcag caccacaaag tagtgtgttg
                                                                      780
ggatgggaac atcagtgttg gctaaatgtt tggtaatttc atctggagca tcaaaatggc
                                                                      840
catcataatt ataatcaaat attggtccac taaccacatt tactccattt ctttctgtgg
                                                                      900
catgttttat aagaagaaca ctgtggaagt agtcccacat ttttctgaat tcttcataca
                                                                      960
taggtaccaa attgctagta attaaagcat catattggct atctgatgtt ctattqctgg
                                                                     1020
caggaggata gaggaagccg tgggtgatat tcttgtctgc taaatagaag gaacattttt
                                                                     1080
ggctctcaga aggaggaacc ctgacatcag cccgcagaca gtctgggaca, gtgggaggca
                                                                     1140
gaggcgatgt gtctcccaac tgggggactg tgtatgaact ccacatgggc atcctcatag
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cttttccaaa tccactgaca tattccctgt ggtaaaggag acagtggtcc acgttcttct
                                                                     1260
gcagtaccct aggcctccca aatggcaaat ttactttcac tgttgctgtt atttcttctt
                                                                     1320
gggtgagatt tagcatctga ttcacttgtt ccagctgagt actattttgt aggtgagggc
                                                                     1380
agaaacagtc aagagactct gtgggcaatg gattagcaaa gccacaaaca gaaaactttg
                                                                     1440
acacetecte tgeatgggat ggeteataaa aaggeacett cagaagatqq tttaaactae
                                                                     1500
catgggttcc attgtttggt gctggttgaa tgcgtagaag atcacacatt aggttataga
                                                                     1560
cttcaatatt ttcaaatggt tcaacttcag tcttctcttt aaaactgggt ccatgtgcca
                                                                     1620
gaaagatage etecatgete etaaaeteat tgttataace atggttgeet eetecacaat
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ttgtatttga tttactccta acagccagcc actgttgatc cacaaagaga tgaactttgt
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cgattctgac gttcttggca tagtgcagtc gctttggcaa atcaggagtc aaatagggct
                                                                     1800
tgaaatgctg atcaggtttt cggcaactga ggtttctaac aatttcctca gaattaaaac
                                                                     1860
taaaaaagtc atgaggtata ttatgagctc ggatgcgggg ggcaggccct tcgtacatgt
                                                                     1920
agaagaagtt tattctggga aaataatcag tcatgtattc catgttgtta caataagtct
                                                                     1980
ggtccattcc atggtcagcc agaaggatga tattgacaca gttgtgcaaa ttccgctgct
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teaggeette cateaacate ecaaaageat gatetactae etgtaagget ttaattacte
                                                                     2100
tggcactgac tggtccacct gcatgtccag aggaatcagg ttcttcaaaa tacatggtat
                                                                     2160
aaaacctggg tettteaget ttgggeaggt ceagecattt taacagtgta gaaateetet
                                                                     2220
cttcaaatgg gacacttccg ttgtaaggca tgtatatgga aggaaaggag ccatttatag
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ccacttttga tccgggccaa aagtaggtag cggcttttaa accttgatac attgctgtca
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gccacattgg ttgcccatgc caccaggctg gattattttg ttcctttgaa gaaagtgaaa
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aattettgtt gagatttaca teatacatat tattgteaat gatgeeatgt gactetggat
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acaagcccgt gacaatggtg taatgatttg ggaaggtttt ggtaggatac atagctctca
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atgtgtataa atattcagct ctaaatccat ccatagaaaa caagataact ggtggcaggt
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caaaccette tgggcactga gactgetggg ctgtgtcaca gttttettee agecatgagg
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tttctccttg gcaaacactc ttatagtcag cacagcaatc tttcttctgc aaacagtcat
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ctgaacaaga gcaaaggctg gcctctaatc tggtctctcc acaacgaaat ttattgcaca
                                                                     2820
tecatatteg agttgattee acacaggtgt etteaaaate ceageageaa teaceteggt
                                                                     2880
ctttacatgc cacatcacac cggcagttct ccagtcctct aaatgatgca tcaaagcact
                                                                     2940
tettectgea getgeettge ttttecagtt teetgagtee aageeceagg ectaateeaa
                                                                     3000
gtgacatgat caccagcaaa gcaagaagaa caatgcaagc tattttatat ttcttaagag
                                                                     3060
tgttcttctt aacaggttgt tccgttgcta aagtcaacgt agattccat
                                                                     3109
```

```
<210> 3436
<211> 2899
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc feature

```
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agggetggee gegeteetgg gaegeetgte egaeegeete ggeaggaace gggaeegeea
                                                                      120
gcgcaggagg tcaccatggc tgttattggc tcccttgctg tccccagctg ttccccaggt
                                                                      180
cacctcccca ccttgctgcc tgtgtccaga aggcgtgcac cggttccagt ggatcagaaa
                                                                      240
cctggttcca gaatttggag tctccagttc tcacgttagg gtgctttctt ccccggcaga
                                                                      300
gtttttcgag ctcatgaagg ggcagataag agtagccaag aggcgggtcg tgatggcatc
                                                                      360
cctctacctg gggacaggtc ctttggaaca ggagctggtg gactgcctgg aaagtactct
                                                                      420
agaaaagtca ctccaagcaa agtttccttc aaatctcaag gtctccattc tcttagactt
                                                                      480
cacgegggge teacgaggee ggaagaacte cegeacaatg etgeteecae teetgeggag
                                                                      540
gttcccagag caggtccgag tctccctctt tcacacgccg cacctccgtg ggctgcttcq
                                                                      600
geteeteate cetgageget teaacgagac categgeete cageacatta aggtgtacet
                                                                      660
cttcgacaac agcgtcatct tgagcggtgc aaacctgagt gactcctact tcaccaaccg
                                                                      720
ccaggaccgc tacgtgttcc tgcaggactg tgcggagatt gccgacttct tcacggagct
                                                                      780
ggtggacgcg gtgggggatg tgtccctgca gctgcagggg gacgacacgg tgcaggtggt
                                                                      840
ggatgggatg gtgcatcctt acaaagggga ccgggccgag tactgcaagg cagccaataa
                                                                      .900
gagggtcatg gatgtgatca actcagccag gacccgccag cagatgctgc atgcccagac
                                                                      960
cttccacage aactetett tgacccagga agatgcagea getgetgggg ategcagace
                                                                     1020
agecectgae acetggattt ateegetgat teagatgaag eeettegaga tteaaatega
                                                                     1080
tgagattgtc actgagaccc tgttgactga ggcggagcgc ggggcaaagg tctacctcac
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cactggctat ttcaacctga cccaggccta catggacctg gtcttgggca ctcgggctga
                                                                     1200
gtaccagate etgetggeet caccagaggt gaatggette tttggggeea agggggtgge
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cggcgccatc ccagcggcct atgtgcacat cgagcgacag ttcttcagtg aggtgtgcag
                                                                     1320
cctgggacag caggagcggg tccagcttca ggagtactgg cggaggggct ggacgttcca
                                                                     1380
cgccaaaggt cagttcaccg ggacctggag gcccagattg cgatcgtgac ggagaaccag
                                                                     1440
gccctgcagc agcagcttca ccaggagcaa gagcagctct acctgaggtc aggtgtggtg
                                                                     1500
tectetgeca cettegagea geegagtege eaggtgaage tgtgggtgaa gatggtgaet
                                                                     1560
ccactgatca agaacttctt ctgaggacag acaggtgctg tctctagcat cacctctcag
                                                                     1620
cacgattttc ccgagagttc acaggtgggg caggtggttg ttctgactca accagagett
                                                                     1680
ccagaggget ctttgatece ttteteagtt aaacacagag cageatette aggggtatgg
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cagetgteet caaagttaga agetggatge taaattagge agtetgttea etttecatet
                                                                     1800
ggtacccact ccactaagtc ccaaggcgcc tgtgctgggg tcggcagtgg cagcctgtag
                                                                     1860
teceettetg etetecette ecagggggte etgaagaage eetggggeaa gggeteaggg
                                                                     1920 -
atgagggggc agaaaggcag attgagcccc tccaagctga gcacactggt gcaggagatg
                                                                     1980
tagacgtggg aggaggggag cacgtttgct cgtgagagtg gctctggctt gctgcctgg
                                                                     2040
ccggctgtag tgcacagggt ggggcgtcgg tagagccaga ccgtgggctg ctgcctggac
                                                                     2100
geetegetga catecetgtg etgeggttae agagetgege cettetagae tetqqaaqtt
                                                                     2160
gagtaacagg acctgctctg cccacccagg aggggcctgc cgcttcacca qaqqcaccaq
                                                                     2220
tggggtccca cagtcacctg aggtacccct ggactgtctt gacgcctaga ggtccgggca
                                                                     2280
gggggtggct gccattaaag gtggggtctt tgctgagtga ccttttgtgt cctggatccc
                                                                     2340
teagggeetg gaetgeacte egggtggggt eaggeteeeg aggeceetge tetetggtte
                                                                     2400
tggatgttgt gggtagttct gttgctttgg atggctgggc ctttggatgg tggcttgtgg
                                                                     2460
ggaagggacg gtgaggagtc aaagatgagc caggacccat gtggccggca catgcgctag
                                                                     2520
tgccggcatc tcatgtgtgc agcgtgggct cccttagtgc ctggcacctt agtgctctqc
                                                                     2580
taagteteat tgtttaaaaa tgtgtagttt atetgeaget ttteetagtt attttaatta
                                                                     2640
cttttcattt tatttgaata gtgtgtgcaa atgtagagag taaaacaata ctgcggccat
                                                                     2700
tteetgeeet ceetteeeee aggeageeae tettggettg tttettetga tgtgeaeaeq
                                                                     2760
tgtccgtatt tctaaataac gtgcatatcc tgctgtcttc ccccaaaatg tgtacttaac
                                                                     2820
caaaacagca ccagtgtcac tcctgaaaca aaaattacca agaatgtctt agtatcatca
                                                                     2880
aatacctaaa tggtgttca
                                                                     2899
```

```
<210> 3437
<211> 2461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(693)
<223> similar to gi3676132 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3437
getttegtee cetteetett ggtgaeetgg tegteageeg cetteattat etectaegtg
                                                                       60
gtcgccgtgc tctccgggca cgtcaacccc ttcctcccgt atatcagtga tacgggaaca
                                                                      120
acacctccag agagtggtat ttttggattt atgataaact tctctgcatt tcttggtgca
                                                                      180
gccacgatgt atacaagata caaaatagta cagaagcaaa atcaaacctg ctatttcagc
                                                                      240
actcctgttt ttaacttggt gtctttagtg cttggattgg tgggatgttt cggaatgggc
                                                                      300
attgtcgcca attttcagga gttagctgtg ccagtggttc atgacggggg cgctcttttg
                                                                      360
geetttgtet gtggtgtegt gtacaegete etacagteca teatetetta caaateatgt
                                                                      420
ccccagtgga acagtetete gacatgecae atacggatgg teatetetge egtttettge
                                                                      480
gcagctgtca tccccatgat tgtctgtgct tcactaattt ccataaccaa gctggagtgg
                                                                      540
aatccaagag aaaaggatta tgtatatcac gtagtgagtg cgatctgtga atggacagtg
                                                                      600
gcctttggtt ttattttcta cttcctaact ttcatccaag atttccagag tgtcacccta
                                                                      660
aggatatcca cagaaatcaa tggtgatatt tgaagaaaga agaattcagt ctcactcagt
                                                                      720
gaatgtcgca ggccatttct aaaagtgcta cagaggacag acagggtttt gaggccaccc
                                                                      780
tgattattgg gatgcatctg cagcacatcc aggacttgaa tttcattacg agttcctaat
                                                                      840
agttgtattt ctaaagatgt gtttcctaga gaatgtacag ccttatgaca ctgtagtgat
                                                                      900
gtttttataa ttttctaagt agattttttt atattaacaa attcatatac agaaaaaatt
                                                                      960
aggttgttac aaaaaatgga gagctcttat ttttgtacag attctgtcgt tttttttta
                                                                     1020
tttgtgtgag atttatggaa atacactaaa tgagtaattc aggttcagta catttattac.
                                                                     1080
aaagtgaaat caggggatat tcatttgtaa attttattct tagtgaatga actgtataat
                                                                     1140
ttttttatc aggagagcac ttataaaatt caatttataa atatcatata cccaaatcat
                                                                     1200
aaagatttag ttgatacatt aacactaaga tactctgatt tttagccaaa ctaaacaaag
                                                                     1260
tgcttctact gagaggcctt tataccacca tgtacagtaa ctctaagtga atacggaaga
                                                                     1320
cettggtttt gaaattetge cacettgttt etceetgete atgaggtege acettttget
cttgctgcta attgcccatt cgtagtgggt gtaatgccag gtggaatggt ttcaacaagt
                                                                     1440
caggtgaaaa ccatccttta ttgttgctgg cacaacttga tatatagtct gactcagaac
                                                                     1500
tgaageteae ateteaaatt eattteatge eagtaaatgt ggeaaagaga agaaaggeee
                                                                     1560
aagagcgaga caagaagaat ggagaagggg gcagccaaga agaacttctg ggttcagggt
                                                                     1620
actgtttatt tgctccttct cttcatgcct gtggctggat gtcccacaac actataagaa
                                                                     1680
atataagtca agccctttgt gttaagcaag aactacagac tccatctttt cacccaaatc
                                                                     1740
atgaatgacc aataaaaagc aagttattcc agaggaagaa gcagcccttg aaatgttaag
                                                                     1800
gettaggett gaaaggtgaa gageaggaat tetetette aaateetaga geataaacee
                                                                     1860
atgtgtggcc aagtgagatc agccctcaag ggcacatgcc aagggcagag cagcccatgt
                                                                     1920
agadagette ggagggcatg ggggtgtagg gagttegggg tageteetea ttaactattt
                                                                     1980
gttgggtgag taaaggggtg aggctcagtg gcaggtacct ctgcaatgac aagctgcctc
                                                                     2040
ccctctatgt gtttagcata tgttattäga acatgtccga cacccctacc gctgccattt
                                                                     2100
gggcccttta ataaagccaa gtagagaaat ctggcaataa aaggcaaatg taagcatgct
                                                                     2160
ttctttaaga cgcatcataa atggttttct ttaagtgaat ggaagagttt gacagagata
                                                                     2220
```

```
cacctttgta agaaaacatt aagaatgctg gctggctgtg gtggctcaca cctgtattcc 2280 cagcactttg ggaggcctag gcaggaggat tgcttgagcc tgggacttcg agaccagact 2340 gggaaacatg gcaaaatccc atctctacaa caaaaataca aaaattagcc aagtgcggtg 2400 gtgtgcctgt agtcctagtt acttgggagg ctgaggtggg agaatcacct gagcccagga 2460 g
```

```
<210> 3438
<211> 5925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (272)...(3795)
<223> similar to gi4589512 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3438
atatcggagg aatcccagaa tatagataca gcttaaattt tgtcttacaa agtcagcact
                                                                       60
tattggttat tcattgttgc gtgttctcaa aggccctgag tcaactgtct ctactcagtt
                                                                      120
aaatactatt tggacttgtc ccttatggtt tcaagcacaa ttattacaat atttggggct
                                                                      180
tacaaaaatt ttatttataa ctagctttta atttaactag atattgtaaa aattggaaat
                                                                      240
ttggaatatt catttctttg tcctgttgta ggtggcgctc tgttttccga atagtgaccc
                                                                      300
tgtgatgttc atggatgcat tttatgggtg tctcctggca gagctgggtc ctgtcccat
                                                                      360
agaagtgcca ttaacaagaa aggatgcagg cagccagcag gttgggtttc tgctgggcag
                                                                      420
ctgtggagtc ttcttggccc tgaccacaga cgcttgtcag aaaggcctcc ccaaggcaca
                                                                      480
gacaggagag gtggcagett tcaaaggttg geceegete teetggetag tgattgatgg
                                                                      540
gaagcateta gecaageeee caaaggaetg geaceetetg geecaggaea cagggaetgg
                                                                      600
gactgcctac attgagtata aaaccagcaa agaaggcagt acggtggggg tcacagtgtc
                                                                      660
ccacgcatcc ctgctggcac agtgccgggc tctgacccag gcgtgcgggt actcagaagc
                                                                      720
tgaaacatta acaaacgtgc tggatttcaa aagggatgct ggtctgtggc atggcgtgtt
                                                                      780
aacaagcgtc atgaacagga tgcacgtggt cagcgtcccc tacgcgctga tgaaggcgaa
                                                                      840
cccactetee tggatecaga aagtgtgett etataaaget egggeegege tggtgaagte
                                                                      900
gegagacatg caetggtete teetagetea geggggeeag agggaegtea geeteagete
                                                                      960
actigcgcatg ctgattgtgg ccgatggtgc caacccgtgg tcgatctcct cctgtgacgc
                                                                     1020
cttcctcaac gtcttccagt ccagaggtct gaggccagag gtcatctgtc cttgtgcaag
                                                                     1080
ttctcctgag gcgctgactg tcgccatccg caggccacct gatctgggag gaccacctcc
                                                                     1140
aagaaaagca gtcctgtcga tgaacggtct aagttatggt gttatcagag tggatactga
                                                                     1200
agaaaagttg tcagtcctta ctgttcagga cgttggtcag gtgatgcctg gagctaatgt
                                                                     1260
atgtgttgtg aagttagaag gtacccctta tctttgtaaa actgatgaag tgggagaaat
                                                                     1320
atgegteagt tecagtgeaa etggeaeage gtaetatgga ttgettggaa teaegaagaa
                                                                     1380
tgtgtttgag gcagttccgg tcaccacagg aggagcaccc atctttgaca ggccattcac
                                                                     1440
caggacagge etgetggget teategggee tgaccacetg gtetteateg tgggcaaact
                                                                     1500
ggacgggctg atggtcactg gagttcgcag acacaatgca gatgacgttg tggccaccgc
                                                                     1560
actggccgtg gagcccatga agtttgtcta cagaggcagg atcgctgtgt tctctgtgac
                                                                     1620
cgtgctgcac gacgaccgga ttgtcctggt ggctgagcag cggccggatg cctcggagga
                                                                     1680
ggacagette cagtggatga geegtgtget geaggeeatt gatageatee accaggtggg
                                                                     1740
cgtgtactgt ctggccctgg ttcctgccaa caccttgccc aaggctcctc tcggagggat
                                                                     1800
tcacatttct gaaaccaaac agcgctttct ggaagggacg ctgcacccgt gtaatgtgct
                                                                     1860
gatgtgccct cacacctgtg ttaccaacct ccccaaacct cgtcagaaac aaccagaggt
                                                                     1920
```

```
tggaccagcc tcaatgatcg tggggaacct ggttgctggg aagagaatcg ctcaggcttc
                                                                    1980
C99gagagag ctcgcccacc tggaggacag cgaccaggca cggaagttcc tgttcctggc
                                                                    2040
tgacgtgctg cagtggcgtg cccacaccac tectgaccac cegetgttet tgetgetgaa
                                                                    2100
cgccaagggc accgtcacaa gcactgcaac ctgtgtccag ctgcacaaaa gggctgagag
                                                                    2160
agtggccgcg gctctgatgg agaagggaag actgagtgtt ggggaccatg tggctctqqt
                                                                    2220
ctacccacca ggggtggacc tcattgccgc gttctatggc tgcttgtact gtggctgcgt
                                                                    2280
gcctgtcacc gtgcggcccc cgcaccctca gaacctcggc accacactgc ccaccgtcaa
                                                                    2340
gatgatcgtg gaggtcagca agtctgcatg cgtcctcacc acgcaggctg tcacacggct
                                                                    2400
getcaggtcc aaggaggetg etgetgeegt ggacateagg acetggeeca ceatectaga
                                                                    2460
cacagatgac atcccaaaaa agaagatagc aagcgttttc aggcccccct cccccgatgt
                                                                    2520
cctcgcatac ttggacttca gcgtgtcaac cactgggata ttagcgggag tgaagatgtc
                                                                    2580
gcacgcggcc acaagcgcct tatgccgctc cataaagctg cagtgtgagc tgtaccctc
                                                                    2640
geggeagate gecatetgee tegaceceta etgtggeett ggttttgeee tqtqqtqtet
                                                                    2700
gtgcagtgtc tactcgggac accaatcagt gctggtgccc ccgctggagc tggagagcaa
                                                                    2760
cgtgtccctg tggctgtcgg ccgtcagcca gtacaaggcc cgcgtcacct tctgctgcta
                                                                    2820
ctctgtgatg gagatgtgca ccaagggcct aggcgcacag acgggtgttc tcaggatgaa
                                                                    2880
gggggtgaac ctgtcatgtg tgcgcacgtg catggtggtc gccgaggagc ggccccagga
                                                                    2940
ttgcgctgac ccagtccttc tccaagctct tcaaggacct gggcctgccg gcccgcgccg
                                                                    3000
taagcaccac gttcgggtgc agggtcaacg tggccatctg cctccagggc acagctggcc
                                                                    3060
cggaccccac aaccgtctac gtggacatgc gggcactgcg ccatgacagg gttcgtttgg
                                                                    3120
tagaacgggg ttctccgcac agcctgccat tgatggagtc tggaaagatc ctccccggcg
                                                                    3180
tgaaggtcat catcgcacac accgagacca aaggaccctt gggagactca cacctgggag.
                                                                    3240
agatetgggt aageageeee cacaatgeea eegggtaeta cacegtttae ggggaggagg
                                                                    3300
cgcttcatgc cgaccacttc agtgcccggc tgagttttgg agacacacag accatctggg
                                                                   3360
caaggaccgg ctaccttggc ttccttcggc gaacagagct cactgatgcc agtggagggc
                                                                    3420
ggcacgatgc actgtatgtg gttgggtctc tggatgaaac tctggagctc agaggcatgc
                                                                    3480
ggtaccaccc catcgacatt gagacctctg tcatccgagc acacaggagc atcgctgagt
                                                                    3540
gtgccgtatt cacctggacc aacctgctgg tggtggtggt ggagctggat gggctagagc
                                                                    3600
aggatgccct ggacctggtg gccctggtga ccaacgtggt gctggaggag cactacctgg
                                                                    3660
tcgtgggagt ggtggtcatc gtggacccag gggtgatccc tatcaactct cggggtgaga
                                                                    3720
agcagegeat geacetgegg gaeggettee tggetgaeca getggaecee atetatgteg
                                                                    3780
cctacaacat gtgagcgcag cacaccggcc caggtgccgg agatgaatga gccccagcag
                                                                    3840
tccaaggtgt gatgtgggaa gacaccgcag agctcactca ccgggactcg cccttcctgt
                                                                    3900
gctcttacag atccctctca acaatccccg catctccttt tagaaagcac ttcctgaatt
                                                                    3960
atttaaagaa atattttgaa tctgccaagt acatttacaa aaacacggat gctggtattt
                                                                    4020
taacagatgg agagacaagg aaaggaaagg aaaggcctgg catgggcatt gtgaggaatc
                                                                    4080
acaggcaccg aggttgttct ctgctgtact gcaagtttgc actttcttta ggctaaaaat
                                                                    4140
atagttcctg atttttaaaa ttcagttatt tattcccact tcaaatgaca agttcatata
                                                                    4200
tagaatttac gggagaaact tgagaccatt tacggggaga aacttgattc tgggaagata
                                                                    4260
gcagagtaca aaccagctgc ctcacttctg tttcacaggg aggctgatgg aaaaaggaag
                                                                    4320
caagetggae ceatecteee tgeteacaga gggeaetgtg gteacacaca gtgeeteete
                                                                    4380
tgccagttcc tttattgaaa gaggtgtgct ggctggccac ggtggcttac acctgtaatc
                                                                    4440
ccagcacttt gggaggccga ggcgagcaga tcacgatggt ctccatctcc ttacctcgca
                                                                    4500
atccgcccgc ctcagcctcc caaagtgttg ggattacagg catgagccac cgtgcccggc
                                                                    4560
ctatagaaat caatcttttt gactcttctc acttttatct ccccatgccc aaggtttgcc
                                                                    4620
tgttccataa cactcactcc cttccccctt gctaatcaga agccatctcc tctcagtgtc
                                                                    4680
tgatctctgc tcttcataca tgattacagt catggggtag agagtgcttg ctaaattatg
                                                                    4740
cagttaatcc tatggtgctt taattttcag gccttcaaaa aacacttgta cagtgatgtg
                                                                    4800
cagattttta aacagttgaa cttccttgta ctacagtttt tgtattgaca gccaaatttg
                                                                    4860
tettteatte tteagattgt gaataaagtg atttttacag ggetteeage aaagttttte
                                                                    4920
ctttcatcta aggcttgtag aaccctagct tatatagctg cttacatgag aaatgcaaaa
                                                                    4980
totgtattca coatgacttt agtaacaaag gtaaagtttt ttagtagtgo caaggcaaga
                                                                   5040
5100
tggctttctc tctgagcatt gaggtatact agaagtagag cttctcaaac ataatatcat
                                                                    5160
tacctcataa gcattaacaa atcaggccca aagagcgtaa gtcctagaaa tttgttttaa
                                                                    5220
agcageceta gteatggtge tggtgetace geettgtttt aggageetge etectgteag
                                                                    5280
tatgaaaccc tcacctgaaa aatgccagcc tggacaccaa acactgagcc ccttcaacag
                                                                    5340.
```

```
gcacattatt tccccctgag atccataagg gaatttagtt tctactattg tagagttctg
                                                                     5400
aaaagaggta aaatagtagt cetttggtea teetattttt gettteaatt ttgatattte
                                                                     5460
agactgtaaa aggccttggg ggatgatagt acatgtggta gcagtaattt ttttgaagca
                                                                     5520
actgcactga cattcatttg agttttctct cattatcaga ttctgttcca aacaagtatt
                                                                     5580
ctgtagatcc aaatggatta ccagtgtgct acagacttct tattatagaa cagcattcta
                                                                     5640
ttctacatca aaaatagttt gtgtaagtta gttttggtta ccatctaaaa tatttttaaa
                                                                     5700
tgttctttac ataaaaattt atgttgtgtt ttaaaatcct tagggggcttt atctattttt
                                                                     5760
ctaagtcagt taactgtact tctaaaaaaa gtattttgta tctacttttg taacttcgtc
                                                                     5820
agaataaaat atattgaaag caagaaatgg ctgattaaag tatgtatatc aacacaccct
                                                                     5880
tctatttaaa tatagaaact tgagaattta gcaaaaaaaa aaaaa
                                                                     5925
```

```
<210> 3439
<211> 1620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1394)...(606)
<223> similar to gi5360119 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3439 ttttttttt ttaaattaat ttaatttaat ttaatttaaa aaatcatgca agtagaaatg 60 actititicce cettitatea ataaaatget geecaaaatg actagettat tittititta 120 attgaaccca aaagaagctt ctagtatgga gcaagtctgg tggaaaagca gcatatctcc 180 caggagagaa gggaaacgga gcagggccaa tcatcaggtg acagtgcagt gctactcatc 240 accatcatga aaaactcatg agcgtcagac gcgccacagg gattcctgat caggtaatat 300 ctgctattat tatgacaagc tccatagaaa aatgtagaca gcagggcaga aagacattat 360 totttataaa taaaaggtto atotgtgcaa tattgacatt agaaaaatat acattgottg 420 ccatagacct tctctggata aaatcagacg aatctaggat ctgactccac ttcactgtga 480 gggctctggc tccacggtga cgaccgactc cacagcttct agaggaactc cttctagcgg 540 gcccatccgc aggcacgccc ctctgcatca gtcactgtga caatgtcctc ctcctgagac 600 actattgtac ctggagggga caagataagc ccatcggaag tctgaataaa aatctgcttc 660 tgtccctgag acagtaactc atggctccca ttggaaattt caaaagccat ggcttcgcca 720 acagcaacca cgctctccag ttctctctgg ccagagtgca cctccatccc acaggggaac 780 cggttcaagt cccccgaaag gcttctgaga cacccttcag tcaatagtga tccatgtggg 840 ccaggetgag gecetggett gggcacagte etgtaggeae agtecaetge caegetatee 900 acagacaaaa ttttctcaag cggaggggct gccacctctg taggcaggac gctggtgggg 960 ctgggctgct ggtggttcag gtggaagtca caaaccttgc cgaggtgtcc tgcctctgca 1020 tgtccaggcc ccccaggcgg cagggactct gctccaccac cagatgacaa agggctgcag 1080 aaacccgggc teetcagget gteccaggtg teetggtetg aagagtgtte caaagcatte 1140 tetecaggaa acgetgeeac etgtgeetgg gteageetee taggetetee tgaetgagea 1200 taaacaggca gcccactgac atcccgggat gagagagcag cacctataga ccccctcctg 1260 gettetaagt tagecagtge etgaagetge gggeeegeet ggaacaeget eccattgeea 1320 ccagaaaccg tcgttgtatg gctttcttca gaacggggag agacagtcac atttactgga 1380 ggggaaaaac ctaaacattt tgggaaacag gtgaacatgg cgtgtactgt gtcatggccc 1440 acteaetgea eteaecaece aaaaceaget aggecaagte acetgeeetg cagaaaagte 1500 aaagcatcga tgctccttgc tccttgggat tggtagcaat tttaaaaaaat acgtccctat 1560

```
<210> 3440
<211> 4487
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(3896)
<223> similar to gi5931959 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3440 gccgggtcga cgatttcgtc cgagtacctc acgcaagatg gcggagctgg aggaggtgac 60 tctggacggg aagcctcttc aggcgctgcg ggtgaccgac ctgaaggccg cactggagca 120 gegaggeeta gecaagageg ggeagaagag tgeeetggte aageggetea aaggggetet 180. aatgctagaa aatttacaga aacactcaac accccatgct gcattccagc caaattccca 240 gattggtgag gaaatgagcc agaacagttt cataaaacag tatctggaaa agcagcagga 300 gctacttagg cagcgtctgg aacgtgaagc tcgagaagct gcagaacttg aagaagcttc 360 agetgagteg gaggaegaga tgatecatee tgagggagtg getteeetge tgeeteetga 420 ctttcagagc agcctggaga gaccagagct ggagctcagc agacattcgc ccagaaaaag 480 ctcctcaatt tctgaagaga aaggtgactc tgatgatgag aaaccaagga aaggagaaag 540 acgateatet agggteagae aggeaagage agetaaactg tetgagggea gecaacetge 600 tgaggaggaa gaggatcaag aaacacette cagaaaceta agggtcagag cagatcgaaa 660 720 ggaaggtgat gatgagggac aaaaatctag ggaggcacca atcctgaaag agtttaagga 780 agaaggggaa gagataccta gagtaaaacc agaggagatg atggatgaga gacccaaaac 840 aagatcccag gaacaggagg tgttagagag aggagggaga tttacaagat cccaggaaga 900 ggctagaaaa agtcatctgg ccagacagca gcaggagaag gaaatgaaaa caacatctcc 960 ccttgaggag gaagaaagag aaataaaatc ttcacaaggc ttaaaggaaa aatcgaagtc 1020 tectteceet ectegactga etgaagateg aaagaaggee teacttgtag egetgeeaga 1080 gcaaactgcc agcgaggagg agactcctcc acctttacta acaaaggaag catcttctcc 1140 accacctcat ccacagetee atagegaaga agaaatagag cccatggaag gcccagecee 1200 coctgtcctc attcagttat ctcctcctaa tacagatgct gacaccaggg agctattagt 1260 atctcagcat actgtccagt tggtaggagg cctgtctcct ttgtcaagtc cttcagacac 1320 caaagcagaa tetecageag agaaagtgee agaggagagt gteetgeete tggtteagaa 1380 aagcacactg gctgactact cagcccagaa ggatcttgaa cctgagtcag acagatctgc 1440 tcagcccctc cctctaaaaa ttgaggaatt agcactggcc aaaggaatca ctgaagaatg 1500 totgaaccag coatotttgg aacagaagga aggcagaaga gottotcata coottotoco 1560 aagccadaga ttgaaacagt cagetgatte atcetetage eggteeteet catetteete 1620 ctccagttct agatcaagat ctcgctctcc tgacagttca ggttctcggt ctcattcacc 1680 gctcagatcc aagcagagag atgtagccca ggcacgtact catgccaacc ctcgtggtag 1740 acccaagatg ggctccagat caacatcaga gtccagatca aggtcacgtt cacgttcacg 1800 ttctcgttca gcatcaagca acagcagaaa atctctgagc cctggagtct ccagggacag 1860 cagcaccage tatactgaaa ccaaagatce etettetggt caggaggttg caactccace 1920 agtgccacaa ctgcaggtct gtgagccaaa ggagaggact tccacctcct catcctctgt 1980 ccaagcaagg cgtctgagtc agcctgaatc agctgaaaag catgtgaccc agaggttaca 2040 gcctgagcgg gggagcccaa agaagtgtga agctgaagag gcagagccac cagctgccac 2100 acagececaa aceteagaga eteagacete teatetgeca gaateagaaa gaatteatea 2160 cactgttgag gagaaggagg aagtgaccat ggacacaagt gaaaacagac ctgaaaatga 2220

```
tgttccagaa cctcccatgc ctattgcaga ccaagtcagc aatgatgacc gcccggaggg
                                                                     2280
cagtgttgaa gatgaggaga agaaagagag ctcgctgccc aaatcattca agaggaagat
                                                                     2340
etcegttgte teagetacea agggggtgee agetggaaae agtgacacag aggggggeea
gcctggtcgg aaacgacgct ggggagccag cacagcccac cacacagaag aaaccttcca
                                                                     2460
tcagtatcac cactgaatca ctaaagagcc tcatccccga catcaaaccc ctggcggggc
                                                                     2520
aggaggetgt tgtggatett catgetgatg actetegeat etetgaggat gagacagage
                                                                     2580
gtaatggcga tgatgggacc catgacaagg ggctgaaaat atgccggaca gtcactcagg
                                                                     2640
tagtacctgc agagggccag gagaatgggc agagggaaga agaggaagaa gagaaggaac
                                                                     2700
ctgaagcaga acctcctgta cctccccagg tgtcagtaga ggtggccttg ccccacctg
                                                                     2760
cagagcatga agtaaagaaa gtgactttag gagatacctt aactcgacgt tccatttgcc
                                                                     2820
agcagaagtc cggagtttcc attaccattg atgacccagt ccgaactgcc caggtgccct
                                                                     2880
ccccaccccg gggcaagatt agcaacattg tccatatctc caatttggtc cgtcctttca
                                                                     2940
ctttaggcca gctaaaggag tggttggggc gcacagaaac cttggtgaaa gaggcctctg
                                                                     3000
ggattgccaa gatcaaatct cattgctttg taacgtactc aacagtagag gaagctgttg
                                                                     3060
ccacccgcac agetetgcac ggggtcaaat ggccccagte caatcccaaa tteetttgtg
                                                                     3120
ctgactatgc cgagcaagat gagctggatt atcaccgagg cctcttggtg gaccqtccct
                                                                     3180
ctgaaactaa gacagaggag cagggaatac cacggtccct gcaccccca ccccacccc
                                                                     3240
cggtccagcc accacagcac ccccgggcag agcagcggga gcaggaacgg gcagtgcggg
                                                                     3300
aacagtgggc agaacgggaa cggcaaatgg agcggcggga gcggactcga tcagagcgtg
                                                                     3360
aatgggatcg ggacaaagtt cgagaagggc cccgttcccg atcaaggtcc cgtgaccgcc
                                                                     3420
gccgcaagga acgtgcgaag tctaaagaaa agaagagtga gaagaaagag aaagcccagg
                                                                     3480
aggaaccacc tgccaagctg ctggatgacc ttttccgaaa gaccaaggca gctccctgca
                                                                     3540
tetattgget eccaetgaet gaeageeaga tegtteagaa agaggeagag egggeegaac
                                                                     3600
gggccaagga gcgggagaag cggcgaaagg agcaagaaga agaagagcaa aaggagcggg
                                                                     3660
agaaggaagc cgagcgggaa cggaaccgac agctggagcg agagaaacgt cgggagcaca
                                                                     3720
gtcgggagag ggacagggag agagagagag aaagggagcg ggacaggggg gaccgagatc
                                                                     3780
gggataggga aagggaccga gaacgaggca gggaaaggga tcgcagggac accaagcgcc
                                                                     3840
acagcagaag ccggagtcgg agcacacctg tgcgggaccg gggtgggcgc cgctagctgg
                                                                     3900
gaaaacacta gagctgcagg taccagccac tcggccccag ggggttatgg ccacagaggg
                                                                     3960
ataggcacag tetecaceae cetggageea agggtettte acateaceta tecetacata
                                                                     4020
cataccaaat ggaaaagtgg ccatcctttt ccccccaaac acacccctt aacctatctc
                                                                     4080
ttgggactta geeegaceet eceteteatt teecattaag tetgagagge aagagetagg
                                                                     4140
ttaggcaagg aggtggttgg ccagagatgg ggaacagcca ggtgccccag tcctctgatt
                                                                     4200
tttcctccat cctgcttacc acctccctgg gtacttacag ccttctcttg ggaacagccg
                                                                     4260
gggccaggac tgggtcacct atgagetgaa teagcatete etectgagte edagggccee
                                                                     4320
tgeagtteed agtetettet gteetgeage cettgeetet tteecacagg ttecacttta
                                                                     4380
tatccacctt ttccttttgt tcaattttta tttttatttt ttttattatt aaatgatgtg
                                                                     4440
gtctatggaa aaaaaaataa aaatctgact tagttttaaa aaaaaaa
                                                                     4487
```

```
<210> 3441
<211> 1969
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (55)...(1179)
<223> similar to gi4972746 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3441
tgaaaagttt gccaaactgt cgttgatgtg ggagagaaaa cgtcagagtt caaggccaaa
                                                                     60
ggctacttag ctctggggct cacgtacagt ctgcaggcca ctgacqcttc tttgcgaggq
                                                                    120
atgcaggagg tectacagag aaaggegett ettgcattte agagggeeca cageetgtea
                                                                    180
cccacagate accaageage tttetacetg getetgeage ttgccatete cagacagate
                                                                    240
ccagaggete tggggtatgt ccgccaaget etteagette aaggtgacga tgccaactee
                                                                    300
etgeacetee ttgeceteet getgteagea cagaageatt accatgaege tetgaacate
                                                                    360
ategacatgg ecetgagtga atacecagaa aattteatae taetgtttte caaagtgaag
                                                                    420
ttgcagtcac tctgccgagg cccggacgag gcactgctga cttgtaagca catgctgcag
                                                                    480
atatggaaat cetgetacaa eetcaccaac eecagtgatt etggaegtgg gageageete
                                                                    540
ttagatagaa ccattgctga cagacgacag cttaatacaa ttactttgcc agacttcagc
                                                                    600
gatcccgaga caggctccgt ccatgccaca tcggtagcag cctcaagagt ggagcaggca
                                                                    660
ctgtcggaag tggcttcgtc tctgcagagc agtgccccta agcagggccc gctgcacccc
                                                                    720
tggatgacgc tggcacagat ctggctccat gcagctgaag tctatatcgg catcgggaag
                                                                    780
cctgcagaag ccacagcctg tacccaagaa gctgccaacc tcttcccaat gttcccacaa
                                                                    840
tgtcctctac atgcgcggcc agattgctga gctccgggga agcatggacg aggcgcggcg
                                                                    900
ggggtatgaa gaggccttag ccatcagccc cacccacgtg aagagcatgc agcgactggc
                                                                    960
cetgateett caccagetag geegetacag tetggeggag aagateetee gggacgeggt
                                                                   1020
gcaggtgaac tcgacagccc acgaggtctg gaacgggctg ggcgaggtcc tccaagctca
                                                                   1080
gggcaacgat gcggcggcta cggagtgctt cctgacagcc ttggagctgg aggccagcag
                                                                   1140
eccegeegtg ceetteacea teateceeeg egtgetetga geaggegeet gecageetea
                                                                   1200
cetgeegete aggeeteaga ggeeetgeeg ggeaceaggg ettgtgeeat egeeceaagg
                                                                   1260
ggatgaatet geegeactga ggeeagggae gagtgtteag tgggeeacag tgaaccaace
                                                                   1320
aaaccaaccc cgaatcatcg ctctcgccat gtgcgtttct cttgtttttt ttgccagccc
                                                                   1380
aatggtagtt totgaacota ttgacattgt toaaaatgga toatgtgcca tattttgtta
                                                                   1440
gttgacatct gagttttcag taaaatgatt atggaattaa tcagcaaatg tagaagaata
                                                                   1500
tattcaaagt taaaattcag tggcagcaca gattattttt atcagagctg taaagaaaac
                                                                   1560
aactgteett tteteeceae caceceteet geeceaettt ggeecagaaa ccaaatgtga
                                                                   1620
acttectgte teccacetea geactagtee atgecaggae accagetgae aatttettgg
                                                                   1680
ttttactgtc aataattgta ccatgtgatc aattactgtc ctcacttaga acaaagcctg
                                                                   1740
agtccgagaa tatttatatt ttaccaatat atgcctgtta caagagaagg aaatatgagt
                                                                   1800
tatttaagtt taacttttt atgtgaattc agagtttatt tatcgaggga aatatgtaca
                                                                   1860
aagaagette aaatggaata tttacegaca tteettatae atgacagaca ettggetaca
                                                                   1920
1969
```

```
<211> 2263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2228)...(668)
<223> similar to gi3879811 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 3442

```
<400> 3442
ttttttttt ttgctcttta aatttgctct tttaattgca ttaaataaat ccatttcatt 60
gttttacttt ctgggaaaag ggttaaactt caaatatctg aaatactttt catttatacc 120
aggtcaagaa aaatgccaca gccagaaaaa tttattttaa aatagaaaca tacattaagc 180
```

```
tttaaaacaa ccaactotca aactgaaaga ggaaagagoo tttgatooca gagtocatgo
                                                                      240
ggaatgaatt ccatacggtg tttgaaattc acataaggag cacttaggaa aaccacctga
                                                                      300
aatgggaaat ccaacaggcc cccttggcct gtgagggctt cccacccctg gcccgtgtga
                                                                      360
gggacatggg ccgaaccccg ggacactcgt gtgccgggag gccaccacag ctcaaggtga
                                                                      420
ccgggcagca cccagctctg tgaccaagac agatgttcac acgtgggggc atcgtaagcg
                                                                      480
ctaccagete caaatetgae gtgatgggaa ettgggagat gtetgagaaa tgteegaagg
                                                                      540
gattttggca acacagaaaa cgcaatgtct aggaattcct ccaaatgctt ccaaaaatac
                                                                      600
tcattgacaa ttcaagttgc acttggctgg cggcagcccg ggcggccttc agtccgtgtg
                                                                      660
gggcgcccgc gtggccttct cctcgtagga ctccccaaac tcgttcactc tgcgtttatc
                                                                      720
cacaggataa agccaccgct ggtacaggta gaccagaaac accacgtcgt cccggaagca
                                                                      780
ggccagccgg tgagacgtgg gcatggtgat gatgaaggca aagacgtcat caatgaaggt
                                                                      840
gttgaaagcc ttgtaggtga aggccttcca gggcagatgt gccactgact tcaacttgta
                                                                      900
gttcacaaag agctggggca gcatgaagag gaaaccaaag gcatagaccc cgttgacgaa
                                                                      960
gctgttgatt aaccaggagt accagctctt atatttgata ttcaggagtg aatagacagc
                                                                     1020
acccccgaca cagagagggt acagcaggta tgacaagtac ttcatggcct gagtatcgta
                                                                     1080
ctcctcggtt ttcctctcag attcgctgta agtgccaaac tgaaattcgg gcatcaggcc
                                                                     1140
tetecaaaaa atagteatet teaatgeett etteaettte cacageteaa tggeggetee
                                                                     1200
aacacccgcc gggaccagca ccagcaggct cgtctgctcg tccagcagga acagaaagat
                                                                     1260
gaccacggtg ctgaagcagc gccagagcac tgccttggtg gacatgccga tcatgctctt
                                                                     1320
cttcttcttc cagaaactga tgtcattttt aaaggccagg aaatcaaaga gaaqatqqaa
                                                                     1380
cgctgcgaca aagaaggtca gcgccaggaa gtataagttg gtatctacaa aaattccttt
                                                                     1440
cacctcatca gcatctttct ctgaaaaccc gaactgctgc agggagtaca cggcgtcctg
                                                                     1500
catgiggate cagaagegea geogeoceag tgagacettg tegtaggaea eggtgagggg
                                                                     1560
cageteggtg gtggageggt ttatgaceat caggteette acgeggttge tgagetggte
                                                                     1620
gatgaacagg atgggcaggt aatgcacggt tttccccagc tggatcatct tcatgtaccg
                                                                     1680
atgcacateg geaggeaggg aggaceegte aaagacaaag ttgteegeea teaegtteag
                                                                     1740
cgccagccgc ggtcgccagt gggacactgg ctcatccagg gcactcgtcg gcttcttgtc
                                                                     1800
egectegate tgetgtgtat cagacteece ggtgagcagg ttgatttett etggettggg
                                                                     1860
gaccatgtag gtggtcagag gactgaccag gtgcacctgc ttcccgtcgt gccacggcag
                                                                     1920
gaccccageg tgatggagga agatgtagge atacagegte ccattgttte tegttttett
                                                                     1980
tggtacagaa acattaactg tcctttcaaa tttggactcc acatcaaagt cttccacatt
                                                                     2040
caagaccagg tegatgttgt teteageace caggtgggac etegtegtgg tgaaqqaqtq
                                                                     2100
cgctcagctg cagcttgggc cgccgcgcca ggtagggctg gatgcagctt gcgtcgccgg
                                                                     2160
agcacgggcg ggtgtagacg atgccgtaca tgacccagca ggtgtgcacc acgtagacca
                                                                     2220
cgaacacgcc gcaccaccaa gctggtgaag gagctgcggc cgc
                                                                     2263
```

```
<210> 3443
<211> 1878
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1307)
<223> similar to gi4510377 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3443
gtatctcatg ctaatgctct acaaaggaaa ggccgagcag gccgtgttgc atctggggtc 60
tgcttccatt tattcactag ccatcactac aatcaccagc ttttaaaaca acagctacca 120
```

```
gaaatacaaa gagtgccatt ggaacagctg tgtctaagaa ttaaaatttt agagatgttt
                                                                      180
agigeteata atetecagie igigitetet eggeteatig aacetecaea cacegatiet
                                                                      240
cttcgtgcct caaaaatacg attacgagac ttaggagcat taactccaga tgaaagattg
                                                                      300
accectettg ggtateattt ggeetetetg ceegtggatg tgagaattgg caaactaatg
                                                                      360
ttgtttgggt ctatcttccg ctgtttggat cctgctctca ccattgctgc cagtttggct
                                                                      420
tttaagtcgc cgtttgtatc tccctgggat aaaaaagaag aagctaacca gaaaaagctg
                                                                      480
gaatttgcat tcgcaaacag tgattatctg gcccttctac aagcgtataa gggatggcag
                                                                      540
ctaagtacaa aagaaggcgt gcgtgcaagt tataattact gcagacaaaa cttcttgtct
                                                                      600
ggaagagtto tgcaggaaat ggccagcctc aaacgacaat tcacggaact gttatcggat
                                                                      660
atagggtttg caagggaagg gctcagagca agggaaattg agaaaagggc ccaaggagga
                                                                      720
gatggtgtct tagatgccac aggagaagag gcaaactcaa atgctgagaa ccccaagctg
                                                                      780
atatcagcaa tgctgtgtgc ctgctttgta tccaaatgta gtgcaggtga aaagcccaga
                                                                      840
aggaaaattt cagaagacca gtactggagc tgtcagaatg caaccaaaat cagctgagtt
                                                                      900
gaagtttgtc accaagaacg atggatatgt acacattcac ccttcatcag tgaactatca
                                                                      960
ggtgagacac tttgacagcc cctacctgtt gtaccacgag aagataaaaa ctagtcgagt
                                                                     1020
attcatccga gactgcagca tggtgtctgt gtacccgctg gtcttgtttg gaggaggcca
                                                                     1080
agtgaatgtg cagcttcaaa gaggagagtt cgttgtctcc ctggatgatg gttggatccg
                                                                     1140
ttttgtaget getteecate aggtggetga aetggtaaag gagettegtt gegaaettga
                                                                     1200
tragettete caggataaaa ttaaaaaccc aagcattgat etgtgtacgt gteetegagg
                                                                     1260
atcccggatc atcagcacaa ttgtgaaact tgtcaccaca caataaaaag cagtcttaga
                                                                     1320
gagtgettge tactcacetg ettetagete acetgggaaa taacageaga acetetacet
                                                                     1380
cgaactaaag acctattggg gctggccctg gtggaggagc ccagggcatg aagcccaagg
                                                                     1440
cagctgagge agtgtatata cccttaggge catttctaac aaagccttgg ccactcccag
                                                                     1500
cacaatttgg agtgtcaagg gtgagagcct aaaacccagc ttgcctgtct ttgtctctgt
                                                                     1560
gattgttctg gagtgaatta agttcacctg ataactcaaa agtgaatgta taatacaatt
                                                                     1620
ctgttttaat ctgtgtattc tttttctcct actttttact ggggtgagag gggcatgaag
                                                                     1680
agaaatacgc ctttttttt ttttttcct gtcgccaagg ctcgactgag agaagtcaaa
                                                                     1740
acagagaagg ggaaaaaaaa cccaaaatta tgtgaacaag caaaattaaa atttcatttt
aggettattg gettactgag taaacttgae ttgtgagggg tttttatttt tacteattaa
                                                                     1860
aagtcaacaa aaaaaaaa
                                                                     1878
```

```
<210> 3444
<211> 6436
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5017)
<223> similar to gi180803 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3444

atggggccc ggctcagcgt ctggctgctg ctgctgccg ccgcccttct gctcacgag 60
gagcacagcc gggccgctgc gaagggtggc tgtgctggct ctggctgtgg caaatgtgac 120
tgccatggag tgaagggaca aaagggtgaa agaggcctcc cggggttaca aggtgtcatt 180
gggtttcctg gaatgcaagg ccacagggac caccaggaca aaagggtgat 240
actggagaac caggactacc tggaacaaaa gggacaagag gacctccggg agcatctggc 300
taccctggaa acccaggact tcccggaatt cctggccaag acggcccgcc aggccccca 360
ggtattccag gatgcaatgg cacaaagggg gagagagggc cgctcgggc tcctggcttg
```

```
ectggttteg etggaaatee eggaeeacea ggettaeeag ggatgaaggg tqateeaggt
                                                                      480
gagatacttg gccatgtgcc cgggatgctg ttgaaaggtg aaagaggatt tcccggaatc
                                                                      540
                                                                      600
ccagggacte caggeceace aggactgeca gggetteaag gteetgttgg geeteeagga
tttaccggac caccaggtcc cccaggccct cccggccctc caggtgaaaa gggacaaatg
                                                                      660
                                                                     . 720
ggettaagtt tteaaggace aaaaggtgae aagggtgaee aaggggteag tgggeeteea
                                                                      780
ggagtaccag gacaagctca agttcaagaa aaaggagact tcgccaccaa gggagaaaag
ggccaaaaag gtgaacctgg atttcagggg atgccagggg tcggagagaa aggtgaaccc
                                                                      840
ggaaaaccag gacccagagg caaacccgga aaagatggtg acaaagggga aaaagggagt
                                                                      900
eceggtttte etggtgaace egggtaceca ggacteatag geegeeaggg eeeegeaggg
                                                                      960
agaaaagggt gaagcaggtc ctcctggccc acctggaatt gttataggca caggaccttt
                                                                     1020
gggagaaaaa ggagagaggg gctaccctgg aactccgggg ccaagaggag agccaggcc
                                                                     1080
aaaaggtttc ccaggactac caggccaacc cggacctcca ggccttcctg tacctgggca
                                                                     1140
ggctggtgcc cctggcttcc ctggtgaaag aggagaaaaa ggtgaccgag gatttcctgg
                                                                     1200
tacatetetg ccaggaccaa gtggaagaga tgggeteeeg ggteeteetg gtteeeeegg
                                                                     1260
gccccctgga cagcctggct acacaaatgg aattgtggaa tgtcagcccg gacctccagg
                                                                     1320
tgaccagggt cctcctggaa ttccagggca gccaggattt ataggcgaaa ttggagagaa
                                                                     1380
aggtcaaaaa ggagagagtt gcctcatctg tgatatagac ggatatcggg ggcctcccgg
                                                                     1440
gccacaggga cccccgggag aaataggttt cccagggcag ccaggggcca agggcgacag
                                                                     1500
aggtttgcct ggcagagatg gggttgcagg agtgccaggc cctcaaggta caccagggct
                                                                     1560
gataggccag ccaggagcca agggggagcc tggtgagttt tatttcgact tgcggctcaa
                                                                     1620
aggitgacaaa ggagacccag getitecagg acagecegge aigecaggga gagegggite
                                                                     1680
tectggaaga gatggecate egggtettee tggeeceaag ggetegeegg gttetgtagg
                                                                     1740
attgaaagga gagcgtggcc cccctggagg agttggattc ccaggcagtc gtggtgacac
                                                                     1800
eggeeeeet gggeeeeeag gatatggtee tgetggteee attggtgaca aaggacaage
                                                                     1860
aggettteet ggaggeeetg gateeecagg cetgeeaggt ceaaagggtg aaceaggaaa
                                                                     1920
aattgtteet ttaccaggee eccetggage agaaggaetg eeggggteee eaggetteee
                                                                     1980
aggteeceaa ggagaeegag gettteeegg aaeeeeagga agggeeagge etggeeagga
                                                                     2040
gagaagggcg ctgttgggcc agccaggcat tggatttcca gggccccccg gccccaaagg
                                                                     2100
tgttgacggc ttacctggag acatggggcc accggggact ccaggtcgcc cgggatttaa
                                                                     2160
tggcttacct gggaacccag gtgtgcaggg ccagaaggga gagcctggag ttggtctacc
                                                                     2220
gggactcaaa ggtttgccag gtcttcccgg cattcctggc acacccgggg agaaggggag
                                                                     2280
cattggggta ccaggcgttc ctggagaaca tggagcgatc ggacccctg ggcttcaggg
                                                                     2340
gatcagaggt gaaccgggac ctcctggatt gccaggctcc gtggggtctc caggagttcc
                                                                     2400
aggaataggc ccccctggag ctaggggtcc ccctggagga cagggaccac cggggttgtc
                                                                     2460
aggccctcct ggaataaaag gagagaaggg tttccccgga ttccctggac tggacatgcc
                                                                     2520
gggccctaaa ggagataaag gggctcaagg actccctggc ataacgggac agtcggggct
                                                                     2580
ccctggcctt cctggacage agggggctcc tgggattcct gggtttccag gttccaaqqq
                                                                     2640
agaaatgggc gtcatgggga cccccgggca gccgggctca ccaggaccat ggggtgctcc
                                                                     2700
tggattaccg ggtgaaaaag gggacccatg gctttccggg ctcctcagga cccaggggag
                                                                     2760
accetggett gaaaggtgat aagggggatg teggteteee tggeaageet ggeteeatgg
                                                                     2820
ataaggtgta catgggcagc atgaagggcc agaaaggaga ccaaggagag aaaggacaaa
                                                                     2880
ttggaccaat tggtgagaag ggatcccgag gagaccctgg gaccccagga gtgcctggaa
                                                                     2940
aggacgggca ggcaggacag cctgggcagc caggacctaa aggtgatcca qqtataaqtq
                                                                     3000
gaaccccagg tgctccagga cttccgggac caaaaggatc tgttggtgga atgggcttgc
                                                                     3060
caggaacacc tggagagaaa ggtgtgcctg gcatccctgg cccacaaggt tcacctggct
                                                                     3120
tacctggaga caaaggtgca aaaggagaga aagggcaggc aggcccacct ggcataggca
                                                                     3180
tcccagggct gcgaggtgaa aagggagatc aagggatagc gggtttccca ggaagccctg
                                                                     3240
gagagaaggg agaaaaagga agcattggga tcccaggaat gccagggtcc ccaggcctta
                                                                     3300
aagggtctcc cgggagtgtt ggctatccag gaagtcctgg gctacctgga gaaaaaggtg
                                                                     3360
acaaaggcct cccaggattg gatggcatcc ctggtgtcaa aggagaagca ggtcttcctg
                                                                     3420
ggactcctgg ccccacaggc ccagctggcc agaaagggga gccaggcagt gatggaatcc
                                                                     3480
cggggtcagc aggagagaag ggtgaaccag gtctaccagg aagaggattc ccagggtttc
                                                                     3540
caggggccaa aggagacaaa ggttcaaagg gtgaggtggg tttcccagga ttagccggga
                                                                     3600
gcccaggaat tcctggatcc aaaggagagc aaggattcat gggtcctccg gggccccagg
                                                                     3660
gacageeggg gttaeeggga teeecaggee atgeeaegga ggggeecaaa ggagaeegeg
                                                                     3720
gacctcaggg ccagcctggc ctgccaggac ttccgggacc catggggcct ccagggcttc
                                                                     3780
ctgggattga tggagttaaa ggtgacaaag gaaatccagg ctggccagga gcacccggtg
                                                                    3840
```

```
teccagggee caagggagae eetggattee agggeatgee tggtattggt ggeteteeag
                                                                     3900
gaatcacagg ctctaagggt gatatggggc ctccaggagt tccaggattt caaggtccaa
                                                                     3960
aaggtettee tggeeteeag ggaattaaag gtgateaagg egateaagge gteeegggag
                                                                     4020
ctaaaggtct cccgggtcct cctggcccc caggtcctta cgacatcatc aaaggggagc
                                                                     4080
ccgggctccc tggtcctgag ggccccccag ggctgaaagg gcttcaggga ctgccaggcc
                                                                     4140
cgaaaggcca gcaaggtgtt acaggattgg tgggtatacc tggacctcca ggtattcctg
                                                                     4200
ggtttgacgg tgcccctggc cagaaaggag agatgggacc tgccgggcct actggtccaa
                                                                     4260
gaggatttcc aggtccacca ggccccgatg ggttgccagg atccatgggg cccccaggca
                                                                     4320
ccccatctgt tgatcacggc ttccttgtga ccaggcatag tcaaacaata gatgacccac
                                                                     4380
agtgtccttc tgggaccaaa attctttacc acgggtactc tttgctctac gtgcaaggca
                                                                     4440
atgaacgggc ccatggccag gacttgggca cggccggcag ctgcctgcgc aagttcagca
                                                                     4500
caatgccctt cctgttctgc aatattaaca acgtgtgcaa ctttgcatca cgaaatgact
                                                                     4560
actogractg gotgtocacc cotgagodca tgoccatgto aatggcacco atcacggggg
                                                                     4620
aaaacataag accatttatt agtaggtgtg ctgtgtgtga ggcgcctgcc atggtgatgg
                                                                     4680
ccgtgcacag ccagaccatt cagatcccac cgtgccccag cgggtggtcc tcgctgtgga
                                                                     4740
teggetacte ttttgtgatg cacaccageg etggtgcaga aggetetgge caaqeeetgg
                                                                     4800
cgtcccccgg ctcctgcctg gaggagttta gaagtgcgcc attcatcgag tgtcacggcc
                                                                     4860
gtgggacctg caattactac gcaaacgctt acagcttttg gctcgccacc atagagaga
                                                                     4920
gragatgtt caagaageet acgeegteea cettgaagge aggggagetg egeacgeacg
                                                                     4980
tragergetg craagtetgt atgagaagaa cataatgaag crtgartrag ctaatgtrac
                                                                     5040
aacatggtgc tacttcttct tctttttgtt aacagcaacg aaccctagaa atatatcctg
                                                                     5100
tgtacctcac tgtccaatat gaaaaccgta aagtgcctta taggaatttg cgtaactaac
                                                                     5160
acaccctgct tcattgacct ctacttgctg aaggagaaaa agacagcgat aagctttcaa
                                                                     5220
tagtggcata ccaaatggca cttttgatga aataaaatat caatattttc tqcaatccaa
                                                                     5280
tgcactgatg tgtgaagtga gaactccatc agaaaaccaa agggtgctag gaggtgtggg
                                                                     5340
tgccttccat actgtttgcc cattttcatt cttgtattat aattaatttt ctaccccag
                                                                     5400
agataaatgt ttgtttatat cactgtctag ctgtttcaaa atttaggtcc cttggtctgt
                                                                     5460
acaaataata gcaatgtaaa aatggttttt tgaacctcca aatggaatta cagactcagt
                                                                     5520
agccatatet tecaacecee cagtataaat ttetgtettt etgetatgtg tggtaetttg
                                                                     5580
cagctgettt tgcagaaatc acaattttcc tgtggaataa agatggtcca aaaatagtca
                                                                     5640
aaaattaaat atatatat attagtaatt tatatagatg tcagcaatta ggcagatcaa
                                                                     5700
ggtttagttt aacttccact gttaaaataa agcttacata gttttcttcc tttgaaagac
                                                                     5760
tgtgctgtcc tttaacatag gtttttaaag actaggatat tgaatgtgaa acatccgttt
                                                                     5820
tcattgttca cttctaaacc aaaaattatg tgttgccaaa accaaaccca ggttcatgaa
                                                                     5880
tatggtgtct attatagtga aacatgtact ttgagcttat tgtttttatt ctgtattaaa
                                                                     5940
tattttcagg gatgttttca gggttttaaa cactaatcac aaactgaatg acttgacttc
                                                                     6000
aaaagcaaca accttaaagg ccgtcatttc attagtattc ctcattctgc atcctggctt
                                                                     6060
gaaaaacagc tetgttgaat cacagtatea gtatttteac acgtaagcac attegggeea
                                                                     6120
tttccgtggt ttctcatgag ctgtgttcac agacctcagc agggcatcgc atggaccgca
                                                                     6180
ggagggcaga ttcggaccac taggcctgaa atgacatttc actaaaagtc tccaaaacat
                                                                     6240
ttctaagact actaaggcct tttatgtaat ttctttaaat gtgtatttct taagaattca
                                                                     6300
aatttgtaat aaaactattt gtataaaaat taagctttta ttaatttgtt gctagtattg
                                                                     6360
ccacagacgc attaaaagaa acttactgca caagctgcta ataaatttgt aagctttgca
                                                                     6420
taccttaaaa aaaaaa
                                                                     6436
```

```
<210> 3445
<211> 1709
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1712)...(288)
```

<223> similar to gi2988400 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3445
ttttttttt ttadtatgct tgaactttag gcatttattg tataaactta tacatgccat
                                                                       60
ataaacaaac taaactettt tagetgetat accaagttte cataaaactg tetgetggtt
                                                                      120
ggggaggcta cagcctgacc acattctttg ccattgccta caaggggtaa gaaatggcac
                                                                      180
atggaaacat ggcaggccga ctcacgaaca caggcctggg ccagcgcttt cttcttcctc
                                                                      240
ttttattccc atcagtccta gaccagagag tgaaccatga gtgctcttgg ttcctggcag
                                                                      300
caggatgagg cagagagtgc ccgggcacaa gctgttgtag agctttccaa tcttccggct
                                                                      360
ccagcgccag gctgctatct tcgggtggtc cagtttcaga gtctgcaaqq cctcctqttc
                                                                      420
aaagggggga ggtacaacac gaagccctgg gagccttgtt gattcaggtg gtaagcctct
                                                                      480
gagecaggee atggaggtge cetgggggtt agggeatgee tgeettteag etteeagtee
                                                                      540
ttgcctgtga gaatgttgag ggcctgctgg gcactgccaa aacttttgaa tttcaggaaa
                                                                      600
acagtatttt ttctgctttc cacttttaaq atctttaqqc aaqatcacaq cttccaqqcc
                                                                      660
aagaaagagg cggggctcct gcaatagctg ttctttgaag gtttcactca ctccagacag
                                                                      720
atatatagag ccttggtttt cagaatctcc ttccagctca ttcacgaggg tgtcacaatc
                                                                      780
aagegtgage tetgteacag geetetgeae ettgatgeag ataceateta ecaqaatace
                                                                      840
atccaaggac totatggcca gctgggcagc ttctaggact tcatactgta tacagagatg
                                                                      900
aggctgacgg gtttcaagaa caaaagtcat tgactggact gggccaaagc ttttaaacag
                                                                      960
cetetteaga gecetgagat tgeaattttt getaaatgge ceageataga cagttgatat
                                                                     1020
ctctgtccac ttgatcctca tccttttgtt catctcctca gtgaggacag gtgaaaaggc
                                                                     1080
cttaaaagag aactgaacaa tgctgaaggg aaacaggggg atttccactc tggcctgctc
                                                                     1140
aagaacctct ttatttgaaa gacacttaat agtttgacaa tttctggaag atggaagttc
                                                                     1200
accagcatet gteteceggg teaaaaaaag aagettetga eecaetgaat eeaageatte
                                                                     1260
taaaacactt gtgtttgggt gctgaagtac ttctgctgtg tttttaggct cttggcctgc
                                                                     1320
tgettgtatt tettggtgat tagetagtge ttetagattt agttetgeaa tetttittgg
                                                                     1380
gccatgetta aggaaatace gagecaatte aaggattgtt etaqeatett etqtqqcate
                                                                     1440
atgaccaagt ctgtctggac actgtatatc cttccccaaa ataactttgg ctaagaactt
                                                                     1500
gagettaaat ettetgeeet getetetgae ataaageaae gatgtateaa taacatatqq
                                                                     1560
atgtateatt tteagtgete tgagateeaa atetaaggag tggeecaeta acacageate
                                                                     1620
aggaggaagc agtgctttta actgcctctg tacatctttg agtttggtcg tcactgggtt
                                                                     1680
aagaatette ttegtgatte eegaaaage
                                                                     1709
```

```
<210> 3446
<211> 1320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)...(703)
<223> similar to gi5305702 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3446
tacgccaagc ttggcacaag gccaggctgc acgcggcgga ctgggcaggc cgggcccggg
```

60

```
cactggtggg tgacagtcat acttcgtgga gcccagcgag catcccgggc aagcactacc
                                                                      120
aggetgtggg tetgeacete tggaaggtag agaageggeg ggteaatetg cetagggtee
                                                                      180
tgtccatgcc ccccgtggct ggcaccgtgt gccatgcata cgaccgggag gtccacctgc
                                                                      240
gttgtgaget eteaceggge tactacetgg etgteeceag cacetteetg aaggaegege
                                                                      300
caggggagtt cctgctccga gtcttctcta ccgggcgagt ctcccttagc gccatcaggg
                                                                      360
cagtggccaa gaacaccacc cccggggcag ccctgcctgc gggggagtgg gggaccgtgc
                                                                      420
agctacgggg ttcttggaga gtcggccaga cggcgggggg cagcaggaac tttgcctcat
                                                                      480
accocaccaa cooctgotto coottotogg toccogaggg cootggoocc cgctgogtoc
                                                                      540
gcatcactct gcatcagcac tgccggccca gtgacaccga gttccacccc atcggcttcc
                                                                      600
atatetteca ggteceagag ggtggaagga gecaggaege acceecactg etgetgeagg
                                                                      660
agcogotgot gagotgogtg coacatogot acgoocagga ggtgagoogg ctotgootoo
                                                                      720
tgcctgcagg cacctacaag gttgtgccct ccacctacct gccggacaca gagggggcct
                                                                      780
tcacagtgac catcgcaacc aggattgaca ggccatccat tcacagccag gagatgctgg
                                                                      840
gccagttcct ccaagaggtc tccgtcatgg cagtgatgaa aacctaacag ggtggcccc
                                                                      900
tgtgccagct caggtgactg gagcccgagg gcctgacagg ttcccagcag ctgggccggc
                                                                      960
cagcettgca etgtggggge tggteetgag tettggeetg eeteecagee etgecagggg
                                                                     1020
gctgcggcct aggggtccac gggaagcctc cgtcaggaga gacqcaqccc tggqqqccaq
                                                                     1080
ctggtgctgc aaggaagggt gggaagcttg ctggcttctg ttgcgccact gagacggcag
                                                                     1140
agaccccagg atcccagagc ttcccaggat ccctcccaga tcctctgctg actccatatg
                                                                     1200
gaggeeteae acceagaggg tagggeagea gatettettt ataactattt áttgttegaa
                                                                     1260
tcacttttag gatgtaactt tataaataaa catgagcgct gatgatttgc aaaaaaaaa
                                                                     1320
```

```
<210> 3447
<211> 954
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4) ... (529)
<223> similar to gi1924940 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3447
cgcaagecta cgcggaaggg aatggccaag ggaaaacctc ggaggtcgtc ccaagecect
                                                                       60
accogggogg cocctgogco coccagaggo atggatogca atggggtgoc cocctotgco
                                                                      120
agagggggcc ccctgcccct ggagatcatg tctggagggg gcacccacag gcctccccqq
                                                                      180
ggccctccgt ccacatccct gggagccagc agacgacccc gggcacgtcc gccctcagag
                                                                      240
cacaacacag aatteeteaa egtgeetgae cagggeatgg ceggeatgea gaggaagege
                                                                      300
agegtgggge aaeggeeagt geetggtgtg ggeegaeeca ageeecaqee tegqaeacat
                                                                      360
ggtcccaggt gccgggccct ataccagtac gtgggccaag atgtggacga gctgagcttc
                                                                      420
aacgtgaacg aggtcattga gatcctcatg gaagatccct cgggctggtg gaagggccgg
                                                                      480
cttcacggcc aggagggcct tttcccagga aactacgtgg agaagatctg agctgggccc
                                                                      540
tgggatactg cettetett cgcccgccta tetgcctgcc ggcctggtgg ggagccaggc
                                                                      600
cctgccaatg agagcctcgt ttacctgggc tgcaatagcc taaaagtcca gtcctttggc
                                                                      660
etccagteet geccaggeee tgggteacea ggteactget geageeeeeg eeeetgggee
                                                                      720
ctggtcttcc tccaacatca cacctgctgc ccattctcca tttctgtgtg tgtcaaaggg
                                                                      780
gactaacage agaatetace teccaactge catgtgatta agaaatgggt ettgagteet
                                                                      840
gtgctgttgg caaagttcca ggcacagttg gggagggggg ggtccttaac aagcgtgact
                                                                      900
ttgctcattc tgtcatcact aaggcaataa acctttgcca ggtgaaaaaa aaaa
                                                                      954
```

```
<210> 3448
<211> 4009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3247)
<223> similar to gi3882313 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3448
 agaaaatgca gttgggagct ggacagatga cttgacccag ttgagcctgc tgaaggacac
                                                                        60
 cctctctgcc tatatcagtg ctgatgatat ctccattctt aatgaacgcg tagagcttct
                                                                       120
gcaaaggcag tgggaagaac tatgccacca gctctcctta aggcggcagc aaataggtga
                                                                       180
 aagattgaat gaatgggcag tetteagtga aaagaacaag gaactetgtg agtggttgae
                                                                       240
 tcaaatggaa agcaaagttt ctcagaatgg agacattctc attgaagaaa tgatagagaa
                                                                       300
gctcaagaag gattatcaag aggaaattgc tattgctcaa gagaacaaaa tacagctcca
                                                                       360
acaaatggga gaacgacttg ctaaagccag ccatgaaagc aaagcatctg agattgaata
                                                                       420
caagctggga aaggtcaacg accggtggca gcatctcctg gacctcattg cagccagggt
                                                                       480
gaagaagctg aaggagaccc tggtagccgt gcagcagctt gataagaaca tgagcagcct
                                                                       540
gaggacctgg ctcgctcaca tcgagtcaga gctggccaag ccaatagtct acgattcctg
                                                                       600
taactcggaa gaaatacaga gaaagcttaa tgagcagcag gagcttcaga gagacataga
                                                                       660
gaagcacagt acaggtgttg catctgtcct caacctgtgt gaagtcctgc tgcacgactg
                                                                       720
tgacgcctgt gccactgatg ccgagtgtga ctctatacag caggctacga gaaacctgga
                                                                       780
ccggcggtgg agaaacattt gtgctatgtc catggaaagg aggctgaaaa tcgaagagac
                                                                       840
gtggcgattg tggcagaaat ttctggatga ctattcacga ctttgaagat tggctgaagt :
                                                                      900
cttcagaaag gacagctgct tttcccagct cttctggggt gatctataca gttgccaagg
                                                                       960
aagaactaaa gaaatttgag gettteeage gacaggteea egagtgeetg acgeagetgg
                                                                     1020
aactgatcaa caagcagtac cgccgcctgg ccagggagaa ccgcactgat tcagcatgta
                                                                     1080
geetcaaaca gatggtteae gaaggeaace agagatggga caacetgeaa aagegtgtea
                                                                     1140
cetecatett gegeagaete aageatttta ttggeeageg tgaggagttt gagaetgege
                                                                     1200
gggacagcat tötggtetgg eteacagaga tggatetgea geteactaat attgaacatt
                                                                     1260
tttctgagtg tgatgttcaa gctaaaataa agcaactcaa ggccttccag caggaaattt
                                                                     1320
cactgaacca caataagatt gagcagataa ttgcccaagg agaacagctg atagaaaaga
                                                                     1380
gtgagccctt ggatgcagcg atcatcgagg aggaactaga tgagctccga cggtactgcc
                                                                     1440
aggaggeett egggegtgtg gaaagatace ataagaaact gateegeetg eeteteecag
                                                                     1500
acgatgagca cgacctctcg gacagggagc tggagctgga agactctgca gctctgtcgg
                                                                     1560
acctgcactg gcacgaccgc tctgcagaca gcctgctttc tccacagcct tcctccaatc
                                                                     1620
tetecetete getegeteag eeceteegga gegageggte aggaegagae acceeggeta
                                                                     1680
gtgtggactc catcccctg gagtgggatc acgactatga cctcagtcgg gacctggagt
                                                                     1740
ctgcaatgtc cagagetetg ecetetgagg atgaagaagg teaggatgae aaagatttet
                                                                     1800
acctccgggg agctgttggc ttatcagggg accacagtgc cctagagtca cagatccgac
                                                                     1860
aactgggcaa agccctggat gatagccgtt ttcagataca gcaaaccgaa aatatcattc
                                                                     1920
gcagcaaaac tcccacgggg ccggagctag acaccagcta caaaggctac atgaaactgc
                                                                     1980
tgggcgaatg cagtagcagt atagactccg tgaagagact ggagcacaaa ctgaaggagg
                                                                     2040
aagaggagag ccttcctggc tttgttaacc tgcatagtac cgaaacccaa acggctggtg
                                                                     2100
tgattgaccg atgggagett etceaggeee aggeattgag caaggagttg aggatgaage
                                                                     2160
agaaceteca gaagtggeag cagtttaaet cagaettgaa cageatetgg geetggetgg
                                                                     2220
```

```
gggacacgga ggaggagttg gaacagctcc agcgtctgga actcagcact gacatccaga
                                                                    2280
 ccatcgagct ccagatcaaa aagctcaagg agctccagaa agctgtggac caccgcaaag
                                                                    2340
 ccatcatcct ctccatcaat ctctgcagcc ctgagttcac ccaggctgac agcaaggaga
                                                                    2400
 gccgggacct gcaggatcgc ttgtcgcaga tgaatgggcg ctgggaccga gtgtgctctc
                                                                    2460
 tgctggagga gtggcggggc ctgctgcagg atgccctgat gcagtgccag ggtttccatg
                                                                    2520
 aaatgagcca tggtttgctt cttatgctgg agaacattga cagaaggaaa aatgaaattg
                                                                    2580
 tccctattga ttctaacctt gatgcagaga tacttcagga ccatcacaaa cagcttatgc
                                                                    2640
 aaataaagca tgagctgttg gaatcccaac tcagagtagc ctctttgcaa gacatgtctt
                                                                    2700
 gccaactact ggtgaatget gaaggaacag actgtttaga agccaaagaa aaagtccatg
                                                                    2760
 ttattggaaa tcggctcaaa cttctcttga aggaggtcag tcgtcatatc aaggaactgg
                                                                    2820
 agaagttatt agacgtgtca agtagtcagc aggatttgtc ttcctggtct tctgctgatg
                                                                    2880
 aactggacac ctcagggtct gtgagtccca catcaggaag gagcacccca aacagacaga,
                                                                    2940
 aaacgccacg aggcaagtgt agtctctcac agcctggacc ctctgtcagc agtccacata
                                                                    3000
 gcaggtccac aaaaggtggc tccgattcct ccctttctga gccagggcca ggtcggtccg
                                                                    3060
gccgcggctt catgttcaga gtcctccgag cagctcttcc ccttcagctt ctcctgctcc
                                                                    3120
 tecteategg gettgeetge ettgtaceaa tgteagagga agaetaeage tgtgeetet
                                                                    3180
 ccaacaactt tgcccggtca ttccacccca tgctcagata cacgaatggc cctcctccac
                                                                    3240
 tctgaactaa gcagatgcca tctgcagaag tgctggtagc ataaggagga tcgggtcata
                                                                    3300
agcaatccca aactaccaac aagaggacct tgatcttggc gaaagccctc ggtgtggcag
                                                                    3360
ctttagecet ectecagate acatgtgtge aaattatgge tteagaggtg gaagataaae
                                                                    3420 -
agtgacgggg gaacaaacag acaacaagaa ggtttggaag aaatctggtt tgagactctg
                                                                    3480
aaccttagca ctaaggagat tgagtaagga cctccaaagt tccccggact catgaattct
                                                                    3540
gggcccttgg cccattctgt gcacagccaa ggacttcagt agaccatctg ggcagctttc
                                                                    3600
ccatggtgct gctccaacca tcagataaat gaccctccca agcaccatgt cagtgtcgta
                                                                    3660
caatctacca accaaccagt gctgaagaga ttttagaacc ttgtaacata caatttttaa
                                                                    3720
gagettatat ggeagettee tttttaeett gtttteettt ggggeatgat gttttaaeet
                                                                    3780
ttgctttaga agcacaagct gtaaatctaa aaggcacttt tttttagagg tataaagaaa
                                                                   3840
aactagatgt aataaataag atcatggaag gctttatgtg aaaaaagttg aatgttatag
                                                                    3900
taaaaaaaaa aagatattta tgtatgtaca gtttgctaaa gccaagtttt ggtttggtaa
                                                                    3960
4009
```

```
<210> 3449
<211> 2368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2291)...(1951)
<223> similar to gil203928 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3449
acttagtgca tagactttat caaatgttga ataaaaacag aaacaaaaag gagacaatcc cacaatgaaa aggagacact caggtccacc ctagtgattc cttgtatgtg gaggaggtaa 120 gtgggacatg gacagttcta aaatatagta cgtatatacc cgacaaccac agtgttttgc 180 atttctttat cagtgaaaaa caaactgata tctgaagtgt ataaacagtt ccctagtagt ctatttgaga aaaagtatca aatgtgcatc aatatgttaa aactgacaaa tacaagaaaa 300 gcattcagct agagaaaatt cacagcattt tattcaagtt aatcaatttc attcaataat 360 ctgccatatt gttcccagca ccactattac tgttattatt tctctttgag gaagaccagg 420
```

```
tattaagaaa totggtttga atttocatga tgoctaacto tatggttaaa aatcotttto
                                                                      480
cttaccaaaa aggaacttct taatcaccag agaaacagag ggaagactga gatatgtttg
                                                                      540
cagaaattta tototactag agacaattca tagttcataa totttcaggg ttgtgcttta
                                                                      600
cttgggggct ccgttttcgg gagcgggttg tttcccataa atgtttgctt aatacaaata
                                                                      660
atttgcccca ctgtaccaca gaagggaaat gagggctagt gtccccagaa agcaagcagg
                                                                      720
cagtecteca gggaagaage eetaatgget eetagtggtg acagagteat tetgeetece
                                                                      780
cagcctgtga gcaataataa agtataacta agtgaacagg agaggtaata actagccaga
                                                                      840
taacccatgg gctagaatct ctaaacagaa atgcttgtgt tttgaataaa tcagagctgg
                                                                      900
aaagacacac ttttggagaa gtgattgaga atagaaaggt atgaaaaaga taaaggtttc
                                                                      960
tcaccaacga aaccacaaaa aaggtggtac cagtcaaagg tagacttggg cttttatttt
                                                                     1020
ggggtgaggg taccccaaat gggttgtgcc attttcacat aaaaattgga atgataatga
                                                                     1080
acaagtgaaa gtgaaatcag tttccctcct ttgttcaata aacatggtta gagcacctgt
                                                                     1140
gtgcaagata gtgggacagg tgctgagggg aaaggtaaag ctgtttaagc tgtggccctg
                                                                     1200
agctgaagga gcaatctagc agtgccatca ggccctgcac actgcagagc acagtgtccc
                                                                     1260
aggggccagg tggagggaag gatcacttcc ggctgcagca tcagggaagg cactctgcag
                                                                     1320
tetecectee aggitteteag egigeeteta igeetgigig actgeteage eigeeceatt
                                                                     1380
ccaggcactt gctcatcttc cttatctttc tctgtagcat gagaaatgga agtttgagag
                                                                     1440
gataggatcc tacctcacag gtacctaata aatgtgtgtg gaattgacat atagtggaag
                                                                     1500
tgtcacttta tcttagtgca gcaaggtgga aagagctttg gaaaggagag gaaagatggt
                                                                     1560
ggttgtgagg gtaaggtgtt ttcatcagaa ggcgggagca agggtataca aaccaaaaág
                                                                     1620
tcagtttagt atgtggctta gctcagagca cacgagggta ccaacacagc caaagactgt
                                                                     1680
aagaaggtag ctgaagtcct ctgccaaata ggattgaaaa gctaaaatct ttctctgttt
                                                                     1740
ctttcttaag taacaactgg tctattcaag ctcaaccaga gcatataaga gaaaaactga
                                                                     1800
ctaacgaggg ggtcttaaag agctttgaag gacagtttct agaaagtaga aagatcactg
                                                                     1860
agtaaattac tgcacctcct ctaccccaca aaaaaaaggg tgaggatgaa tgtaaaagtg
                                                                     1920
tagagcaagc tttcagacaa cttcaagttt gtttttggcg cttccgtttg taagcaatca
                                                                     1980
agatggtgag agacgctatc ccaaagaaga aagtctgtag gaaccagagt agctgagccc
                                                                     2040
gaccacttgt gatgccttta tgcttgcaca atactatggc atacaaggac tctcccacat
                                                                     2100
gaatcagcca ggcaagccaa tacccattgc acaggagggt gtgatggtgg tccaccaagt
                                                                     2160
actgagtgaa ggggcccagg ggcccaaggt tctgataagg gatactctga ggccagaaga
                                                                     2220
caacccatgt gtagtagcca aagctgaggg tgatgactgt gaaccagaac agactgcctc
                                                                     2280
gctgaaagta ggtcgcgccg gctgccgtag ccatggctgc aacacctccc cgcccacgcg
                                                                     2340
tecgeceacg egteegeeca egegteeg
                                                                     2368
```

```
<210> 3450
<211> 3790
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(3292)
<223> similar to gi3413874 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3450

cggacgcgtg ggttggattt tttccgtgga tctatcaatt cacaattcga atttggaaga 60
aagaaggaaa acatgacgtc tccagccaaa ttcaaaaagg ataaggagat catagcagag 120
tacgatactc aggtcaaaga gatccgtgct cagctcacag agcagatgaa atgcctggac 180
cagcagtgtg agcttcgggt gcaactgttg caggacctcc aggacttctt ccgaaagaag 240
```

```
gcagagattg agatggacta ctcccgcaac ctggagaagc tggcagaacg cttcctggcc
                                                                      300
aagacacgca gcaccaagga ccagcaattc aagaaggatc agaatgttct ctctccagtc
                                                                      360
aactgctgga atctcctctt aaaccaggtg aagcgggaaa gcagggacca taccaccctg
                                                                      420
agtgacatet acetgaataa tateatteet egatttgtae aagteagega ggaeteagga
                                                                      480
agactettta aaaagagtaa agaagtegge cageagetee aagatgattt gatgaaggte
                                                                      540
ctgaacgagc tctactcggt gatgaagaca tatcacatgt acaatgccga cagcatcagt
                                                                      600
gctcagagca aactaaagga ggcggagaag caggaggaga agcaaattgg taaatcggta
                                                                      660
aagcaggagg accggcagac cccacgctcc cctgactcca cggccaatgt tcgcattgag
                                                                      720
gagaaacatg teeggaggag eteagtgaag aagattgaga agatgaagga gaagegeeaa
                                                                      780
gccaagtaca cggagaataa gctgaaggcc atcaaagccc ggaatgagta cttgctggct
                                                                      840
ttggaggcaa ccaatgcatc tgtcttcaag tactacatcc atgacctatc tgaccttatt
                                                                      900
gatcagtgtt gtgacttagg ctaccatgca agtctgaacc gggctctacg caccttcctc
                                                                      960
tctgctgagt taaacctgga acagtcgaag catgagggtc tggatgccat cgagaatgca
                                                                     1020
gtagaaaacc tggatgccac cagtgacaag cagcgcctca tggagatgta caacaacgtc
                                                                     1080
ttctgccccc ctatgaagtt tgagtttcag ccccacatgg gggatatggc ttcccagctc
                                                                     1140
tgtgcccagc agcctgtcca gagtgagctg ctacagagat gcctacaact gcagtctcgc
                                                                     1200
ttatccactc taaagattga aaacgaagag gtaaagaaga caatggaggc caccctgcaa
                                                                     1260
accatccagg acattgtgac tgtcgaggac tttgatgtgt ctgactgctt ccagtacagc
                                                                     1320
aactccatgg agtccgtcaa gtccacggtc tctgaaacct tcatgagcaa gcccagcatt
                                                                     1380
gctaagagga gagccaacca gcaagagaca gagcagtttt atttcacaaa aatgaaagag
                                                                     1440
tacctggagg gcaggaacct catcaccaag ttacaagcca agcatgacct tctgcagaaa
                                                                     1500
accetgggag aaagteageg gacagattge agtetageea ggegeagete aactgtgagg
                                                                     1560
aaacaggact ccagccaggc aattcctctg gtggtggaaa gctgtatccg gtttatcagc
                                                                     1620
agacacggac tacagcatga aggaattttc cgggtgtcag gatcccaggt ggaagtgaat
                                                                     1680
gacatcaaaa atgcctttga gagaggagag gacccctgg ctggggacca gaacgaccat
                                                                     1740
gacatggatt ccatagctgg tgtcctgaag ctttacttcc gggggctgga acaccctctc
                                                                     1800
ttccccaagg acatetttca tgacetgatg geetgegtea caatggacaa cetgeaggag
                                                                     1860
agagetetge acateeggaa agteeteeta gteetgeeca aaaceaetet gattateatg
                                                                     1920
agatacetet tigeetteet caateattia teacagitea gigaagagaa caigaiggae.
                                                                     1980
ccctacaacc tegecatetg ettegggeee tegetaatgt cagtgecaga gggecacgae
                                                                     2040
caggtgtcct gccaagccca cgtgaatgag ctgatcaaaa ccatcatcat ccagcatgag
                                                                     2100
aacatcttcc caagccccag ggagctggag ggccctgtct acagcagagg aggaagcatg
                                                                     2160
gaggattact gtgatagccc tcatggagag actacctcgg ttgaagactc aacccaggat
                                                                     2220
gtgaccgcag agcaccacac gagcgatgac gaatgtgagc ccatcgaggc cattgccaag
                                                                     2280
tttgactacg tgggccggac agcccgagag ctgtccttta agaagggagc atccctgctg
                                                                     2340
ctttaccage gggetteega egactggtgg gaaggeegge acaatggeat egacggaete
                                                                     2400
atcccccatc agtacatcgt ggtccaagac accgaggacg gtgtcgtgga gaggtccagc
                                                                     2460
cccaagtctg agattgaggt catttctgag ccacctgaag aaaaggtgac agccagagcg
                                                                     2520
ggggccagct gtcccagtgg gggtcatgta gccgatattt atcttgcaaa catcaacaag
                                                                     2580
caaaggaagc gtccagaatc tgggagcatc cggaaaactt ttcggagtga cagccatggg
                                                                     2640
ctgagcagtt ccctgactga ctcctcctcc ccaggggtgg gggctagctg ccgcccatcc
                                                                     2700
teccageeca teatgageea gageeteece aaagaaggge cagataagtg ttecateagt
                                                                     2760
gggcacggga gcctcaactc catcagccgc cactcatccc tgaagaatcg gctggatagt
                                                                     2820
ccacagatec ggaagactge cacageggga aggteaaaaa gettegataa ecateggeee
                                                                     2880
atggaccctg aggtcattgc tcaggatatt gaggcaacaa tgaactcggc cctgaatgag
                                                                     2940
ctacgggaac tagaacggca gagcagtgtc aaacacaccc ctgacgtggt tctggacacc
                                                                     3000
ttggagcccc tcaaaacctc cccagtggtg gccccacgt cagagccctc cagccctctg
                                                                     3060
cacacccage teetcaagga eccegageee geettecage geagegeeag tactgetggg
                                                                     3120
gacategeet gegeetteeg geetgteaag tetgteaaga tggetgeece ggteaaacea
                                                                     3180
ccagccacta cggcccaagc ccacatgtct tccccaaaac aaatgccact agccctggtg
                                                                     3240
tcaactcatc aacttcccca cagtctactg acaagtcttg tactgtctga gggataataa
                                                                     3300
tttaattgtt ctagacaagg ggactatagg gactgactgt tattaaaatc ttcctattta
                                                                     3360
actagettgg ggaetteagt tgaaaattag gtéctaagtt gttettgeag gaattageet
                                                                     3420
ccccgtctcc caaaaccttg agaatgaagc ccttggtatc gcctctccct tcccactgcc
                                                                     3480
ctctgcttcc cccagtcgtc gtaattcagc cagctgcagt ccgtaccgtt cttaggttag
                                                                     3540
ccagagacag gttttcatta tcaggtcact gtgaaatctg gtaaggcagt cctgaggaca
                                                                     3600
tgggctcaag tctcagtccc ctcagaccac ggtgatgcct tgaccagatg gttggctact
                                                                     3660
```

```
<210> 3451
<211> 2343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2344)...(2121)
<223> similar to gi5817268 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3451
ttttttttt ttaaaattaa ataaactttt attttggaat gatactagat ttacagagaa
                                                                       60
gttgcagaga tagtacaaag agttcctgta taccettcac ccagcetace ccaaqqtcaa
                                                                      120
catcttacat caccatggta catctgtcaa aaccaagaga ctgaaattgg tatattaact
                                                                      180
aaaattcaga cttttttcag atttccaatt ttcccactaa tgtcctgttt ttgttccaag
                                                                      240
acccaatcca ggatgccaca ttgcactgaa gacactctcc cttttcaatt ctattactgg
                                                                      300
tcacctcagt caactttccc ggggaaagag aatgcatggg aaaagctctt gtccttatta
                                                                      360
ttgaactgga gaaactgagg cttaaaagtg ccgagtgacc aagttccctt agagggcagt
                                                                      420
gagaacaagg cetgeettae tetgtteeet tteeceaggg actettggtt tteagaagee
                                                                      480
cctctggaat gtcctacctg gcctaacccc ataccagcag tgcagacaag gaggcactcc
                                                                      540
tactacagtg ggtccagccc atggagagac tcacttcctg ccccaacacc tcttccccta
                                                                      600
gaccetgagg gecaggacaa tgtettagtg cettecaact tggcagagtg aggececatg
                                                                      660
agacagagag aaagggggaa gagggaaata cctttatcca aataaatacc catccaaaat
                                                                      720
tatttgtgat aggtgaaaaa tggccacaag ctctttgtgg ttcccctcat caagacatgt
                                                                      780
agtotgtttc tcatcccttg aatotgggta aagcottgtg atttgctctg accaaaagaa
                                                                      840
cttagcagaa gtgacactgt cctagtccca gttccaggcc aagaactcaa gaagtctttc
                                                                      900
agettetact eteactetet ttggaateet gaageeatea tgtgaataag eetgagetag
                                                                      960
cctgctggag aggccacatg gaggagaacc aagcaattcc agccaacagc ctgtcacctg
                                                                     1020
ccaggcaagt gagtaaggct atcctagacc atccaggccc agctgaggta acagctgacc
                                                                     1080 -
ttagetecat gagggatece aggtgtgage ageagaactg ceetgttgag ceeageecaa
                                                                     1140
attgccaacc cataggattg tgggaaaata cagggtttgt ttctagctgc caagtttggg
                                                                     1200
gatggtttgt tacacagcaa aagctaactg gtacacaatt ctgcatttct ctcttggtaa
                                                                     1260
tgggatccca gttttattgc aggaggcagt gtgccagtct cagtagatgg aacacgattg
                                                                     1320
gtctattcag ccatgacaat tctgttccct gctgtcttag ctttgtttgc agctagaggt
                                                                     1380.
gcaatggtag ctggctcggg ccaagggcat ctaagtgaag atatgcagag ggagagagca
                                                                     1440
ggaaacagac ttctgacgag gttttacttt ctgatagaag gtgacgggtc cagctagttt
                                                                     1500
ggcccttcct cttcctccac ccctccttcc ttgaacgcag acatgattct tggggataca
                                                                     1560
gcagccatct tgggaccatg aagtaacgag cactgagatt aaggcaaaag gatccaagac
                                                                     1620
gtgaccccta ccttcgtgga gttgttgaac caataccatt agccacccat ctccagaatc
                                                                     1680
catgctatgt ggaaaaacaa tcttctgttt gtttaaacca ctgcaatcaa ggttttcctt
                                                                     1740
teettgeage tgaatgtagt ceatataaga ggttacatag acaaaaatge agagggatee
                                                                     1800
ttgtccttgg gaatttggag ccggcagcac gtggctcttc aagcccatct ctgttctcct
                                                                     1860
tctcggtaat gcttcaaggg taaggccatg atcctattgt cacagaggtg ggaactgggg
                                                                     1920
ctcccacact gtacagtgag tccaaggcct tgtagccggt gagaggggtg cccagagtca
                                                                     1980
gacceteteg ccaggtgeaa agagaatgea cccetgetat ccettetgea tggcccagee
                                                                     2040
```

```
tgctggaggc caggtgtgtc ttctgggctc ttgaaggtgg cagcaggtgc caaggaggct 2100
gctactgcaa gtctggtgg gatgctccca ggtacaccct taggtctga agagtggact 2160
ggacaagctt ggcggggatg gtctctcgct gcagttgctg gtaggccgcg tagcggtggc 2220
agcccccaaa ggagtagaag tagtcacctc cctgggcccc tttgatccag aggacatcga 2280
tggggggcac gctgtctggg tcctccgga tcgtgtcac gaggctctgc accttggcgg 2340
ggt 2343
```

```
<210> 3452
<211> 981
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(319)
<223> similar to gi5824545 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3452
gccgcggtcg ctatggagga gccggagatg cagctcaagg ggaagaaagt cacggacaag
                                                                       60
ttcactgaga gcgtctacgt cctggccaac gagccatccg tggccctgta ccggctgcag
                                                                      120
gagcatgtgc gtcgctccct ccccgagctg gcccagcaca aggcagacat gcagcgttgg
                                                                      180
gaggagcaga gccagggagc catctacact gtggagtacg cctgcagcgc cgtgaagaac
                                                                      240
ctggtggaca gcagcgtcta cttccgcagc gtggagggtc tgctcaaaca ggccatcagc
                                                                      300
atccgggacc atatgaatgc cagtgcccag ggccacagcc cggaggaacc acccccgccc
                                                                      360
tecteageet gateetggaa gagaeteggg geeeceeage eteegeeaac eeagagaegg
                                                                      420
ggtttcacca tgttggctag gctggtctca aactcctgag ctcgtgatcc tcccgcctca
                                                                      480
geeteecaaa gtgetgggat tataggtgtg ageeacegea eecageettg gtteteeett
                                                                      540
tetteatetg gataaggaag getggaetge acetteteta caggetgagt tggaeatteg
                                                                      600
cagatetace eteccaacet geattetgee teaageagea aegeecacee caggeteagg
                                                                      660
ccacatggag aagccaccc tagttccagt ggtggatgtg gcacctcggc ctggccaatc
                                                                      720
agageteeet tgteetaggt teetagtgat tggttegaga tggacacgtg acceaatgag
                                                                      780
eggeetttee tgggagttet accaggagea teaggaaggt tgagetgggt gtatgggaac
                                                                      840
caggiogggg cgaggggttc caggggggac ctgagaacat tgcgtggagc cctggatcca
                                                                      900
actgtacctg acactagcca atttcatttc ttcagtttca tggaccccta aattatgatt
                                                                      960
tttgccaaaa tgaaaaaaa a
                                                                      981
```

```
<210> 3453
<211> 4362
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1532)
<223> similar to gi1503988 in the genepept database release 114,
```

```
<400> 3453
gcggcggggc tccggctgcg ctcgtggccg ggccgggcgg ggaggccggt cccgcgggcg
                                                                       60
ggggcagggg cggctccgcg gcttctcccg ccgccgccgc caaggggagt ttccaggaag
                                                                      120
tggccatatt ggatccattc agccgcagcc gcccgggcgg agcgcgtccc gcagccggct
                                                                      180
ggtccctgtc gctgccctg cgctcgtccc agcccacccg cccggtgcgg agctcqccat
                                                                      240
ggcggccacc gacctggagc gcttctcgaa tgcagagcca gagccccgga gcctctccct
                                                                      300
gggcggccat gtgggtttcg acagcctccc cgaccagctg gtcagcaagt cggtcactca
                                                                      360
gggetteage tteaacatee tetgtgtggg ggagacegge attggeaaat ceacactgat
                                                                      420
gaacacactc ttcaacacga ccttcgagac tgaggaagcc agtcaccatg aggcatgcgt
                                                                      480
gcgcctgcgg ccccagacct acgacctcca ggagagcaac gtgcagctca agctgaccat
                                                                      540
tgtggatgcc gtgggctttg gggatcagat caataaggat gagagttaca ggcccatagt
                                                                      600
tgactacatc gatgcgcagt ttgaaaatta tctgcaggag gagctgaaga tccgccgctc.
                                                                      660
gctcttcgac taccatgaca caaggatcca cgtttgcctc tacttcatca cgcccacagg
                                                                      720
gcactccctg aagtctctag atctagtgac catgaagaaa ctagacagca aggtgaacat
                                                                      780
tattcccatc atcgccaagg ctgacaccat ctccaagagc gagctccaca agttcaagat
                                                                      840
caagatcatg ggcgagttgg tcagcaacgg ggtccagatc taccagttcc ccacggatga
                                                                      900
tgaggctgtt gcagagatta acgcagtcat gaatgcacat ctgccctttg ccgtggtggg
                                                                     960
cagcaccgag gaggtgaagg tggggaacaa gctggtccga gcacggcagg tacccctggg
                                                                     1020
ggagtggtgc aggtggagaa tgacgaatca ctgcgacttc gtgaagctgc gggagatgtt
                                                                     1080
gatccgggtg aacatggaag acctccgcga gcagacccac agccggcact acgagctcta
                                                                     1140
ccggcgctgc aagttggagg agatgggctt tcaggacagc gatggtgaca gccagccctt
                                                                     1200
cagectacaa gagacataeg aggecaagag gaaggagtte etaagtgage tgeagaggaa
                                                                     1260
ggaggaagag atgaggcaga tgtttgtcaa caaagtgaag gagacagagc tggagctgaa
                                                                     1320
ggagaaggaa agggagctcc atgagaagtt tgagcacctg aagcgggtcc accaggagga
                                                                     1380
gaagcgcaag gtggaggaaa agcgccggga actggaggag gagaccaacg ccttcaatcg
                                                                     1440
ccggaagget gcggtggagg ccctgcagtc gcaggccttg cacgccacct cgcagcagcc
                                                                     1500
cctgaggaag gacaaggaca agaagaatta acgcacgcac agacttacat gtcaagagtg
                                                                     1560
gactttagac tttcatgtgt taagttgctt gagttacacc ttgtgaccct tctcccataa
                                                                     1620
catggtgtga ggacggactg ggagccggta cagactccag tgtttacagc cttgctttcc
                                                                     1680
teccacegae eetggeecea ggetgeeceg ggeetggegg gecacecete tetatgcaaa
                                                                     1740
cacgtaaaag ccatgaatgc tggaatccaa aactgacgag gtttattttt ttcagagcca
                                                                     1800
gtggctggtc ttccatttac agtgtcacta ttccctgacg gagctgttat gtgccgctct
                                                                     1860
agcgaaggcc ccagccggga tgctaggcct aattgttcag cgtggagatg gcaactcacg
                                                                     1920
tggtgcccta gggtgcagct gcgtggtctg gtatacatgc tgcaaaattc acccagctcc
                                                                     1980
cctcatttta atttttctaa cctacagett aattttaata actttaaaac acttctaaat
                                                                     2040
atttattttg gcaccagcgt caagacaaat aatatcctct cccattattt tcataagtaa
                                                                     2100
cacagattcc ctgattttta aaaactaaaa atacagctaa acctttctta tgtataaagt
                                                                     2160
atgcctatca tatacaggga gaggtgggta ataaacttcc tgtaatgaca gtgtttggca
                                                                     2220
tttctttatg gatggaattg gaacatgaac aagaccatgt ccagcgtttt tactgtgaat
                                                                     2280
gtaaatggaa cagcagccca aagctgttgt ctgtgcccca gaggtgctac ctgtagacag
                                                                     2340
ggaccaactc catgtgtgtg tgttaagtgt ttgactccaa ttaagactcc caagcgaatc
                                                                     2400
ctgcatattc caaatgtaaa gagtactcag tgggaaaaag gttgttacct caaagtcatt
                                                                     2460
gettetttee tgggetgggt cacagggtga agagatgaag gtgtetgatg tatatagaca
                                                                     2520
attagggaaa aatgagcggg caaaggagct ttccccttca gctgcactct aaaggggaac
                                                                     2580
attttaaggg agtactagca gctttgactc ttctatgctc ctgttggttt tacaagccac
                                                                     2640
caggatgttc agtgttgaga atacggcctg gtaaaatggg agatgtaaaa tgactaaatg
                                                                     2700
aaaggaaggg tagttttaat gttgaagcac cgtgctgggc actggagcta cccagaggaa
                                                                     2760
tgcacaacgc tecectcaag gagetcacag tetagectae tecetggetg gaagectcag
                                                                     2820
gaagacgtgc taatttattg tggaattggt agtttgcttt tcatgcccct gtcttccttc
                                                                     2880
teatgaceat tteececettt etgtetgget tgeattattg attteeagga ceaagteetg
                                                                     2940
getteeteet geetteetga gatgatgtte tgeteaggga gaagtggagg ggtgagetgt
                                                                     3000
gtgtgtccac tgaggcacgg ccaggaagag gcagccttta cctgtgaggg gctccatgct
                                                                     3060
```

```
ccagcagcag agcaggttct agtgacaatt caacttttta tgctatgacc aggggtggat
                                                                     3120
ctaaatttta tggggctgaa agcttgaatt atttagaaag acttctttaa gaaaaacaat
                                                                     3180
gttaatataa aattaggtac agggtcttgg aaggggccct gaagattaag cttccttagc
                                                                     3240
gtcacaataa gtccgtatct ggttgcaatt gaaaactgat gcttcagtga gggtatctaa
                                                                     3300
aaaggtaaac tggcatatcc agggcaaatg tgggctgcca atggctcatc tctagggtaa
                                                                     3360
ttttatgtct gaaagtgtat gcagttgggt cagagcatga cctttaagat agcctctctc
                                                                     3420
agctaacata tttatgaaga tgaggcctgg tgacccagca ggttcattgg atacataaga
                                                                     3480
aatgagaatt cetggtteat gggeeaacet aggaetetgg agtatgeaga ettggeeatt
                                                                     3540
egtecattgt ggeetgeegg gtegeaeeee aggeataetg aaaggeeata etegtggetg
                                                                     3600
getgeetgeg ggeetaagee tteecaggat etteaggaca ettgacagae ttgtgtttte
                                                                     3660
tggtctgagc tgcctccaca ggtccctcca gcaagcctca ctgcacctct cccctgctgt
                                                                     3720
ttgtgtttgg aattttgtct tctttagctg agaccaaatt aaaccttggt gcataaagtg
                                                                     3780
agettaaaac ttgccactgt ttagtaagtt ageccccata gaatgtgacc ctgtctgcag
                                                                     3840
agteteattt acceptettt tteteattgt catttgttgg etttattagg getgtettae
                                                                     3900
aggatcatgt tggcatttac tatcatgtct ttatcataaa ccatgtttqt ttqaqqtaqa
                                                                     3960
agaatcacca tataattegt tgeccaaatt gggactattg agagagaaag gggatgetat
                                                                     4020
taattacacc agatcaaaag gcataaacca gacctgtccc aggccgatgt ggaaatatgt
                                                                     4080
tetttetagt tgtgggtace etgatetagg tggtttgtaa ttgtgcatta etgactgcat
                                                                     4140
atgittgtgt atgitgtaaat gigggciccc tgitaagigg ggcicatgga tacgaggcci
                                                                     4200
gaggaagtgt ggcttgctag tctgttacgt taacatgctt ttctaaaatt gcttcacgtg
                                                                     4260
ttaattcatt tactcctgca ttcattgact gtttttgttc ttttccattc actttgtact
                                                                     4320
tattttttc attaaatttt gcatttattt tgaaaaaaa aa
                                                                     4362
```

```
<210> 3454
<211> 1128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1129)
<223> n = a,t,c or g

<220>
<221> misc_feature
<221> simisc_feature
<222> (1128)...(793)
<223> similar to gi4406551 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3454
ttttttttt tttggaggga gaaacaactt tattttcatc cagaaattag taatgtttat
                                                                       60
aaatttgttt atagtagttt gtaaattatt atcagaaata gtaatgtcta taaaccactt
                                                                      120
actttaagag acaatcagga actatgatga gggcaataat aaaaggagaa atcttaccaa
                                                                      180
aaaattaacc tggatcgttg tgcttgctct aaaggttaaa gtcacttagg ggaaacagat
                                                                      240
teagtattat ceaatggget taaceateet teettette tgtttgettt ttggtggtgg
                                                                      300
ctgggttaca aagagcagtg tettetgeee tgaaggtage agtattatgg tgggtgeeta
                                                                      360
gaggicaatt atiggittag aagagatica ggcccttaac tittacatgi gctticcagg
                                                                      420
aaaggagaca etttetttet cagecetgtg tgaggactat gttageceag aaagtgttet
                                                                      480
tggaccactg ggtgcccatt ctcagtgcta ggaacaggaa gaccctggtt tcctggtaga
                                                                      540
atttatggat cotacagett tetetecate aaaetttaag teacagtaag ataggactet
                                                                      600
```

```
ggagteacag geacageeag gagaggteag egteettatg etgaeteetg gteetagaea
                                                                      660
tgggtcttaa gatccagtag tcagtaggtc tgttgcaaag tcagggactg gctagatctc
                                                                      720
tccacagcag aagaaagctc atacatgctg acctgaggaa cttaatctga cagtttaccg
                                                                      780
acacacteat aacgeatete tteetteetg tgatgagagt actgetitea tgtgtactgt
                                                                      840
ctgatgacgg gtgagggcag agttettagt gaageetete teacagtgag aacacetgta
                                                                      900
aggettttea ecagtgtggg ttttteggtg ggeaetgaag tgggagetat tattgaaqat
                                                                      960
tttcccacac actgcacact tgtatgggct ctccccagtg tggatgcgcc ggtqaqcact
                                                                     1020
gaactgggaa ctagatgttg aatctctttc cacagacaat gcactggtaa ggcttttccc
                                                                     1080
eggtatgggt egaatteene genntggeet agtggtetge tatteaag
                                                                     1128
```

```
<210> 3455
<211> 1203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1202)...(196)
<223> similar to gi1519052 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3455
ttttttttt tetgittice tgttgtttt aattaaagte geagetetet agaggageae
                                                                       60
tgtccaccta gggaggaaag taggaggcca gtagcaaacc cctcccagag ctggggacat
                                                                      120
gtattcccct ggggaacccg gtggcatccg ccctgaggag cgcaccaccc cgcccagatc
                                                                      180
caggtcccgt cagggtgcca cctgctgcat gggcctgagg ttcggggaca cagcaaaggc
                                                                      240
acacccegtg ctetttttga ttgtcgtcca cccgtaggcc ctcccagagc tccctcagcg
                                                                      300
tragetettt etteetgige acgiraaaca egggettete ggtgatgatg eggteracge
                                                                      360
acceptition oggicagogg categorgest tictocates tetitegegeg tetietett
                                                                      420
tgtgcagtgc tgcatggtga ccaccactct ggtcttctga ctggacacca agtccatggc
                                                                      480
acceccate cettleacet tettgecage gateatecag ttegecaget egeogtatit
                                                                      540
ggaaacctgc atggctccaa gcatggttag ttggatgtgt ccccctcgga tcatggcgaa
                                                                      600
ggagtegteg etggegaaga ageageeece gggaageace gtgaeegtet gettgeetge
                                                                      660
attgatgagg teggeateca ecteatette egtgggaaac gggeecagge ceaggatece
                                                                      720
gttctcactg tgaagatgga cagtcatgct gggactgatg aagttgctgg ccagcagggg
                                                                      780
gatgectatg eccagattgg egtacatgee gteetcaaat tecagagetg egegtetgat
                                                                      840
gatgcgcgtc etggcgtcct ettectttcc agcgtctcca tettectett teeggatcgt
                                                                      900
taagegetea attegtttet egtatttetg eceetttate aegegaceta cataaatgtt
                                                                      960
aggaacgtgg atgtettetg gggggaagee cecaceteca eegeegtgae gtetgeaget
                                                                     1020
ttgcacatgg gcacgttgaa attgcgggcg cttctcctga agaccacgtt tcctgcccgg
                                                                     1080
teggeettee accettteac cagggegaag tetgecegga tggegegete caaaaggaag
                                                                     1140
tggtcgccgt tgaactccct cacctctcgg ggctggctca tgagcgccag gtggccgtcc
                                                                     1200
ggg
                                                                     1203
```

<210> 3456 <211> 1266

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1264)...(210)
<223> similar to gi5870865 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
tttttttttt ttggggggct aggtataatt ttattttata taaaaagtgt ttctgtgatt
                                                                       60
cttcagagcc caggagtcag tgctggtggt tggagggacc tgccccact ggttcattta
                                                                      120
accetetgte teggtgeeet cagaacetea gecagaaagg caaggaggaa atcagagcag
                                                                      180
gageeteata etettggtga tetatteatt etgtgaeete aggggteaea tataaggtea
                                                                      240
gtgtttctcg tccccgccgg atctgcactg ccaactggga ttgggttcga acagcttcat
                                                                      300
aaacatette ageattttgt accatetget eeccaatgge caaaatcaca teaccaggee
                                                                      360
gcagaccage ceggtgtgca ggggagccca ggatgaettt atggatgagt acaccatgct
                                                                      420
gaacatcggg aaagcttggt totcgaagct gtagttcagc aaggatgctg ggactcaggg
                                                                      480
tragratrat carrierate tagregorget gggarcoact gattroggag gaggaattet
                                                                      540
tetttteece acgatgeaga aactetegaa gacgateaga agggatggea aaggagatte
                                                                      600
cagetgtgae etteatggtg tteactecaa teacetecce atecaggtta accagggae
                                                                      660
ctccagagtt tccaaaatca atagctgcat cagtttgaat gtattccaca ttggtttggg
                                                                      720
ggagtcccag gtctctggct ggacgctgag cagagctaac aatgccggat gtgatcgtgt
                                                                      780
tetgeagtge aaagggaett eecatggeaa caacaaacte ceettgeegg acateagetg
                                                                      840
agcgtcccag aggcagcgtg gggagaggct cettagtctg aatcctcage gttgcgatgt
                                                                      900
ctgccacggg atccacaget gtgaccacgg cctcatacgt gtcgccgctt agcagtctca
                                                                      960
cacggactet gegeegatea gecaceaeat gggegttggt gacaatgage ceateggeag
                                                                     1020
ccaccacgaa teetgageeg ttegagatag ggacetegeg geecaagaaa gggtgeeggt
                                                                     1080
ccaggatete gatatagace acggeaggtg etgtettete caccacatet gegatgaagt
                                                                     1140
tgtactgact gaagtccttc agaagtgcac gccgggacca ggattccggg aggccgactc
                                                                     1200
ctccctgccc cacgaatgcc gggaattgtg gtctccgccg gacgcgagtt gtgagacggc
                                                                     1260
ccaagg
                                                                     1266
```

```
<210> 3457
<211> 3899
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2695)
<223> similar to gi5499741 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3457
gactgcctca acaaagaagg ctttgacaaa atagatatca gtgcagttgt ggcatatacc 60
atcgctgtaa aggaggatgg ggagctcaac ctaatgaaga aagcagccag catcacttct 120
```

```
gaagtettea acaaattett caaggaaaga gteatggaaa tagttgatge agatgagaaa
                                                                      180
gttcgacaca gcaaactggc tgagtctgtg gaaaaggcca ttgaagagaa aaaatacctt
                                                                      240
gctggggcag accettetae tgtggaaatg tgttaccete etateattea gagtggtgge
                                                                      300
aactataatc tcaagttcag tgtggtgagt gacaagaatc atatgcactt tggggctatc
                                                                      360
acttgtgcca tgggtattcg cttcaagtct tactgctcca accttgttcg cactttgatg
                                                                      420
gttgatcctt ctcaagaagt tcaagaaaat tataactttt tgctccagct tcaagaggag
                                                                      480
ctgctgaagg aattaagaca tggtgtgaag atatgtgacg tgtataacgc tgtcatggac
                                                                      540
gtggttaaaa agcagaagcc agaactgctg aacaaaatta ccaaaaacct agggtttggg
                                                                      600
atgggaattg aattocogtg aaggotocot agtaatcaat agcaaaaatc aatacaaact
                                                                      660
tgaagaaagg aatggttttc agcatcaatt taggattctc cagacctgac taacaaggag
                                                                      720
gggaaaaagc cagaagagaa aacctatgcc ctgtttcatt ggtgacacag tgcctgtgga
                                                                      780
tgaggatggc ccagctactg ttctcacttc tgtgagaaag aaagtgaaga atgtgggqat
                                                                      840
gttcctaaag aatgaagatg aggaagaaga ggaggaggag aaagatgagg cagaggacct
                                                                      900
tttgggaaga ggttctcggg cagcattact tacagaaaga acaagaaatg aaatgactgc
                                                                      960
agaagagaag cgaagagcac atcagaaaga actagcggct caactcaatg aagaagcaaa
                                                                     1020
gaggégattg actgaacaaa agggágaaca gcagattcag aaagctcgca agtctaatgt
                                                                     1080
gtcctataaa aacccatctc tgatgcctaa ggaaccgcat attcgggaaa tgaagatcta
                                                                     1140
catcgataag aaatatgaga ctgtaataat gcccgtgttt ggcattgcaa caccgtttca
                                                                     1200
cattgccaca atcaagaata taagtatgtc cgtggaagga gattatactt acttgcgaat
                                                                     1260
caacttttat tgcccaggca gtgctctggg caggaatgaa ggcaacatct ttcctaaccc
                                                                     1320
tgaagcgact tttgtcaagg aaattacata ccgagcatca aatattaagg cacccggaga
                                                                     1380
acagacagta ccagcettga acetteagaa tgettteega attattaaag aagtacagaa
                                                                     1440
acgttataaa actcgagaag ctgaagagaa agagaaggag ggcattgtaa aacaagactc
                                                                     1500
actggtgatc aatctaaacc ggagtaatcc gaaactgaaa gatctataca ttcgcccaaa
                                                                     1560
tattgcccaa aagaggatgc aaggctcact ggaggcccat gtcaatggct tccgcttcac
                                                                     1620
atctgttcga ggagacaaag tggatatttt gtacaataat attaagcatg ctttgttcca
                                                                     1680
gccctgtgat ggagaaatga ttattgtctt gcactttcac ctcaagaatg ccatcatgtt
                                                                     1740
tgggaagaag cggcacacgg atgtgcagtt ctacacagaa gtgggagaga taaccacgga
                                                                     1800
cttggggaaa catcagcata tgcatgaccg agatgacctc tatgctgagc agatggaacg
                                                                     1860
agaaatgagg cacaaactga aaacagcctt taaaaatttc attgagaaag tagaggctct
                                                                     1920
aactaaggag gaactggaat ttgaagtgcc ttttagggac ttgggattta acggagctcc
                                                                     1980
ctataggagt acctgcctcc ttcagcccac tagtagtgcg ctggtaaatg ctacggaatg
                                                                     2040
gccacctttt gtggtgacat tggatgaggt agagctgatc cactttgagc gggtccagtt
                                                                     2100
tcacctgaag aactttgata tggtaatcgt ctacaaggac tacagcaaga aagtgaccat
                                                                     2160
gatcaacgcc attectgtag cetetettga ecceatcaag gaatggttga attectgega
                                                                     2220
cctgaaatac acagaaggag tacagtccct caactggact aaaatcatga agaccattgt
                                                                     2280
tgatgaccct gagggcttct tcgaacaagg tggctggtct ttcctggagc ctgagggtga
                                                                     2340
ggggagtgat gctgaagaag gggattcaga gtctgaaatt gaagatgaga cttttaatcc
                                                                     2400
ttcagaagat gactatgaag aggaagagga ggacagtgat gaagattatt catcagaagc
                                                                     2460
agaagagtca gactattcta aggagtcatt gggtagtgaa gaagagagtg gaaaggattg
                                                                     2520
ggatgaactg gaggaagaag cccgaaaagc ggaccgagaa agtcgttacg aggaagaaga
                                                                     2580
agaacaaagt cgaagtatga gccggaagag gaaggcatct gtgcacagtt cgggccgtgg
                                                                     2640
ctctaaccgt ggttccagac acagetetge accececaag aaaaagagga agtaacttet
                                                                     2700
gaactttggc cctgagctcc attettectc cagccaaccc ctgaaaattt tacatgacat
                                                                     2760
agaaactgta tttttccttt cgttttcatt tgaagttttg ccatttgtgt ttatgggttt
                                                                     2820
agggggccat ttgtgtggac caatctactc ggggaattcc aggcccacca ggacacgtgc
                                                                     2880
caatggcccc attcagatgg caagggagga ggtgttcttg aagacaggag gaggctcccg
                                                                     2940
ctgttaataa atattggttc attcttctct cttcctgtca ccttctgcca agacattgat
                                                                     3000
ggcttctgac atcttatttg gtgtctcaaa gctgtatttc caagacagtg gtacaaggtg
                                                                     ,3060
accettaatt accegtatea tggttettga ceageacatt caateeteea acetaceeta
                                                                     3120
ctgccatgac cttccgcaca tctctaagtt ttatctttgc aatactcaag gttctcggaa
                                                                     3180
atttgctaat ggttgtgata aaccatacag cttgagccag tgaggcagat tgggctggtg
                                                                     3240
cettegtetg agtttteetg ettteetgee tegtgeagat tetgaggtat atetgetgee
                                                                     3300
ttggaagaca taagaagcag tgatactccc tggctcggtt attttctcca tacaatgcac
                                                                     3360
acatggtaca atgatagaag gcaaaattgc cactgtcttc tttttttct catatatcta
                                                                     3420
aggaagatat atcaggttgt gcctcatgta ccgcttctag tgaaatgtag aggaaggctc
                                                                     3480
aaaggagtca acatttagat ctggaaggga caagtcatgc cttgggccta gaataccctg
                                                                     3540
```

```
<210> 3458
<211> 1146
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1147)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> in = a,t,c or g
<220>
<221> misc_feature
<221> misc_feature
<222> (1) ... (705)
<223> similar to gi1916290 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3458
gggcgccggg gccgcggccg ggccggctcc agggccggcc gccgcggtgg ggcgcaggcc
                                                                   60
gettgtgega gtgaategag geggegggee cateeggaae eggeeggeea tegeeegegg
                                                                  120
egeggeegge ggeaggegge aggaacegae eggegeeeta eageaggeea aaacaaette
                                                                  180
ccgacaagtg gcagcacgat cttttcgaca gtggcttcgg cggtggtgcc ggcgtggaga
                                                                  240
caggtgggaa actgctggtg tccaatctgg attttggagt ctcagacgcc gatattcagg
                                                                  300
aactetttge tgaatttgga acgetgaaga aggeggetgt geactatgat egetetggte
                                                                  360
gcagettagg aacagcagae gtgcaetttg ageggaagge agatgeeetg aaggeeatga
                                                                  420
480
agattgacgc acageggagg cetgeacaga gegtaaacag aggtggcatg actagaaace
                                                                  540
gtggcgctgg aggttttggt ggtggtggag gcacccggag aggcacccgc ggaggcqccc
                                                                  600
gtggaagagg cagaggtgcc ggcaggaatt caaagcagca gctttcggca gaggagctgg
                                                                  660
atgeccaget ggaegeetat aatgegagaa tggaeaceag ttaaacagae cageaaatee
                                                                  720
gcgtgcggaa caggacccag gcgtctcctc ttgctccctg gttggggggc ggtggctggg
                                                                  780
gctgtgcggc caatgatgga tttgtttctt ttatgtttaa aataggattt aaaaactcat
                                                                  840
gtaaagggtt attttttcc tttttttt tttaaaaccc aaaacagacc ttttttccc
                                                                  900
cgagttattt ttgggaaaaa atttactggt tgctgttggg aaaaaggggc ctttcccct
                                                                  960
tttcctataa aaaaaaaaa atgtgtgtag aaaaaaaaa accaaaaaaa cangggggg
                                                                 1020
gccccctttt aaaaaacccc tcgggggccc ccatttaccc cggggttggc aaaggttatt
                                                                 1080
tttctttttt ttagggggga atataacccc ctctgggtcc ttttggaaaa ccccttttt
                                                                 1140
                                                                 1146
```

```
<211> 455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(456)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (455)...(18)
<223> similar to gi2429362 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3459 gtagaggtag gagctgggag acaggtagag ccatggagag gtggggatctg ggtgaggcac 60 ggggccttgg agaggtggga cctgggtga gggtggaacc tcggagaggt gggacctggg 120 tgaggggtgg agccttggag aggtgggacc tgggtgaggg gtggagcctt ggagagctgg 180 gacctgggtg aggggtggag cctcggagag gtgggacttg ggtgaggggt ggagcctcgg 240 agaggtggga cctgggtgag gggtggagcc tcggagaggt gggacctggg tgaggtgtgg 300 aacctcggag aggtgggacc tgggtgaggg gtggaacctc ggagaggtgg gacctgggtg 360 aggggtggag cctcggagag actgtccctg gacaggggtg ggaccttgag agacctggtg 420 ctgagatgag gtangaccca natgteetet tgeeg 455

```
<210> 3460
<211> 761
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (732)...(101)
<223> similar to gi3337385 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3460
tttttattt attttatat tatttattta ttcttcgtta gtttgttttt ggagcgtggg
                                                                      60
ttttgttttg ttttttgatt tttttctttt tttcgaccca cggatttatt cttattgccc
                                                                     120
aggettgagt geaatggegt gtteteaget tacteaacet eegeetettg ggtttgggta
                                                                     180
attgttgtgc ctcggcctcc ctctgcctct tgggcttggg cgattgttcc acctcatccg
                                                                     240
ccctccgcct cttgggtttc ggtgattgtt ccacctcatc cacctccac ctcttgggtt
                                                                     300
tgggtggttt ttccgcctcg gcctcctgag tagctaaggg aggagtcttg agattatcat
                                                                     360
ccactgaggg tggaagagga gagggtggaa gagggacaaa gagacagtcc ttcagattat
                                                                     420
catccactga gggtgggaag aggaggggt ggaaggggag tgagcagaca ctcgggaggt
                                                                     480
gtcttgaggc tcagggagtt atcagttata gaatgttgtt gagttggagg aggtggctgg
                                                                     540
tggcccatcc tgttttttaa agtttcagct gtgaggtagg gccagtaggg caatcctgaa
                                                                     600
```

```
gaatgacgat gctccgctgc cgccattctg acccagttgc aaagagcctt tcttgcagaa 660 ggggggattt tgcatttgtg gtagtcctct gctcgccgcc gcaactcttg cgcacgttga 720 aacattttcc tatggattac aatcactttc atcagataaa g 761
```

```
<210> 3461
<211> 1773
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . (1774)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (28) . . (1270)
<223> similar to gi5689535 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3461 tegegtaegt aegttgggat getetaeage ggeegegeea teeceateaa geaggggate 60 ctgctaaagc ggagcggcaa gtccctgaac aaggagtgga ggaagaagta tgtgaccgct 120 ctgtgacaac gggctgctca cctatcaccc cagcctgcat gattacatgc agaacatcca 180 eggeaaggag attgacetge tgeggacaac ggtgaaagtg ccagggaage geetgeeeeq 240 agecacacet gecacagece egggeaceag eccaegtgee aaeggegtgt eegtggageg 300 gagtaacaca cagetgggtg ggggcaacag aggcagagga gtegtttgaa tttgtgggtg 360 ggtgtccctc actggggcag acgtgggcac tttcgagggt ttcaacgggc ggagggagcg 420 ggagctgtgg gttcagagtg tgcaggccca gatccttgcc agcctgcaag gcttgcgcag 480 tgécaaggac aagacttega ettggggaac cagaacgcag etetggetgt geaggeegte 540 cgcaccgtcc gcggcaacag cttttgtatc gactgcgatg cacccaatcc agactgggcc 600 agcetgaace tgggtgeeet gatgtgeatt gagtgeteag geatecaceg acaeetgggg 660 geteacetgt ecegggtgeg etecettgae etegatgaet ggeegngtga getgetgget 720 gtcatgactg ccatgggcaa tgccctcgcc aacagcgtct gggagggggc cttgggtggc 780 tactccaage cagggeetga tgeetgeaga gaggagaagg aacgetggat acgggeeaag 840 tatgaacaga agetetteet ggeeceactg ceaageteag atgtgeeact ggggeageag 900 etgeteeggg eegtggtgga agatgaeetg eggetgttgg tgatgeteet ggeaeatgge 960 tecaaagagg aggtgaatga gaeetatggg gaeggggaeg ggeggaegge tetacatete 1020 tccagtgcca tggccaacgt tgtcttcacg cagctgctca tctggtacgg ggtggacgtg 1080 aggagceggg acgecegggg cetgaeteca etggeatatg etegeeggge eggeagecag 1140 gagtgtgcag acatettgat ccagcatggc tgccctgggg agggctgtgg cttagcgcct 1200 acceccaaca gagageetge caatggeace aaccectetg etgagetgea eegtagteet 1260 agectectat aaggeecagg aagaggeag aggggecaga aggaetecat ggeecaaaga 1320 ecctectece tgeaggeact gtgggaacag acacagagat ggagaageag ggacatgetg 1380 agaggacgaa gccaaggaaa ttagggagga gagtcaaagg gatcaaggag agttggggat 1440 ttgagctgca gcagagagg atgagggatt tagccctctg ccctaaggtg ccattgaaaa 1500 gggacaggac cetteggagg tgeetgtgag gagaggggag caggacetet ceetectea 1560 gatecetgee teetagtgee ageceteae aegeetteat cetgaaacag gaagaggaeg 1620 gcaccaagtt gggggtgctg gatgaaagag acgaggggtg atctgtgagt cccatgtaaa 1680 ctttgtacat tggaatattt atgtttgtgt acatatttga tgtgtgtgtg tatgatgagc 1740

```
<210> 3462
<211> 2239
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2152)...(1400)
<223> similar to gi1710175 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400>.3462
ttttttttt ttctcctttc ctcaacagtt ttattgcctt ttaagaaaat ttttgtaaaa
                                                                       60
tataaataca aaggcagaga atttacttac aaagttaaaa cacagatttc aaacataaac
                                                                      120
acacgattca gaaaaatttt agttttatgt acatttccaa gcaacctcaa catattatgt
                                                                      180
tagttttcaa tattttacag ggtacagaaa aaaatagctc aaagtcttct ttaaataaga
                                                                      240
gcataaaatg tttaaacata taaacaatcc ggtttgatgc gtgaaaacta atttcacagc
                                                                      300
ttttaaatta ggatataaaa gtttcataca attagttgtt gtgtgtggat atggtttgaa
                                                                      360
tttatattac acactactgg attacatcca atagcattta cctggcccga gcaggtactc
                                                                      420
tgtaaacaaa acaaagttat atcaccaagt gccttccccg aattcgctcc ctcaaaccaa
                                                                      480
ccacacagtt ctgaccactc tacagtcatg gcctgtcatc agagctttgt atgaaattaa
                                                                      540
gtcaaagtgt ggagctcctt ttactcattt ttttttctcc ttaaaaaaga aaagaaacaa
                                                                      600
atgttccaag taaaaacaaa cgtatcccaa agcatgtgtg cattgaaaag taaagaaaca
                                                                      660
ttataacaac ttcataaaaa ctgacttaaa agtttaaaag gaaaaaaaca tgtttctaag
                                                                      720
tccttctgac tggagtaatt tctcttatat aaagaagaga tattttcata tgtaatagtg
                                                                      780
tcctttcttt acagaaatag ttgtattatg acacatatgc acaaggatta acactataac
                                                                      840
acactgtaca tggtgggtcc agettgetca ccagtagttg tetgaggeca gateaetggg
                                                                      900
gtggagccac tctacagagg agcccagcag agtctgaatt tcgttcgtga attccaccag
                                                                      960
atctaacage teettaettt cagggttgaa ggettecagg tetttggage aagagaacaa
                                                                     1020
gagacttgca gaaacctgcc gataaaattc tgcctctgca atggtgacaa tttccacgtt
                                                                     1080
tggaaaattg cagcgaaata tgcgggagga cattttcaat ttcttaagga catccgaaag
                                                                     1140
cagtagecag tttegtggee cetgagecae agataettgg atgttataae aeggtaagag
                                                                     1200
gggggtctct gaaaattcaa attcaaacac atcgctatag gcatcgtcat catcatcctg
                                                                     1260
gtcttctggt cctggggggt tggctaaaac atcatagcca ctttcatcat ctggttcaca
                                                                     1320
aacagagetg ceatagaagt ceeaagtgee actggegtea teatcattge gaccetggag
                                                                     1380
gtcatttaaa taatctgtta agaacttttc cataagttca ctgtgggtca ttttcatgat
                                                                     1440
ggttctacct gagtacgtag ccaaggtggg gtcagcacca taagagagaa gtagtcggac
                                                                     1500
aatttecaag tgategttet caacageate gtgeagagge etggtteeat eetgggeact
                                                                     1560
acagttgaca tcagcgccat attcaaggag gtgtcgcaca atgttgagcc agcccctagc
                                                                     1620
acaagettea tgeagggege agtaacetge gttgteeega tgatttacat cacaaatett
                                                                     1680
gttetetaag cagtacagga ccaetteete atagecaage etggetgeee getgeagaag
                                                                     1740
ggtctcgcca gcgttcttat tgacaataag tctccgtgct tccggcggca tagggcgaga
                                                                     1800
ctgggtggtc tcctgagggg aacttgagca tggcagctgt gtggactggg aggctggtag
                                                                     1860
cagttgctgc aagcggtcga agggctttgg ctcctgcttg gctggtgaca gatcatagtc
                                                                     1920
cgaactgggc teeggeeget ttetgaatet eeggacagte acettgeeat eggeattete
                                                                     1980
cacgtagtat teceetgica giggeaatee eegeetggae teetgaggga teaagtgitt
                                                                     2040
ggttttgcac agtctcttcc cggatggctt ctcgctgttg tcggtgtatt tctgcagcag
                                                                     2100
ggaggcagcc tggcaatcct cttcttcgtc tgcacacagc acatctgtct tctggttttc
                                                                     2160
```

<210> 3463
<211> 2063
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2064)...(737)
<223> similar to gi2852632 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 3463 ttttttttt tttccaattt aaaatggtag aatttatttt aatataatga tatatatgtgtccacatata ctattttaaa aataagcatg taaattataa tcattataaa acataagtta 120 ggccctaatt taatattatc aaggtaaaat gagcacatat aggaagtcag tctaactttg 180 ttcgcacttg tcttttaaag ttagaataca ttaaaagatt tagcaccgtt gtattttatc 240 ttatttcagt tttcatgtta tcatcaacta taaatacccc ttaggaaatg taccacctta 300 taacttacat tggaatagcc caatatttct taggtaggtt attaaacgta ccatttaaat 360 caccctaaac caaataatcc taaaaaaata ctgggtttaa attaaaaccc tgaggaatta 420 aaatttggtt ttacacaata gttttgggtt aagtggcaat ttccatggta catacctacc 480 tttggtttaa gggatgtact tggtaaggcc atagtaaaaa taaaatctac gtaagtaaca 540 atctaatact atatttaatt tgttgctaca aagttgtttt gtttctctaa aaagtagttt 600 ttgcatatca ttctggacct cttcacccat ctgctggctt atttgcttta tatacaacag 660 ttaaaatttg tgcactaagc tgagctgcct tcacaattgt ggttcagaca aaatgcaccc 720 aaagaactac atgitaagag agticatgic catgcicaac catggcitge acaaattgci 780 tgaagacacg atccatgtaa gtggactgtc ttggccagat tccctccaga aaaccaatat 840 ggcctccata agaagtaagg accaaagcaa cattaggatt ttgcttagca gtttctattg 900 gaatagcatg actgggtgag aaaacatcat ccacagaatt tagacacaat actggaattc 960 ctactgactt cagtctagga ctcggactgg catcagtata ataatcatca attgtttggt 1020 atccaaacat gactgaagtg aatcgcttat caaactctct gatggattta gccttcatga 1080 catgatccat atcaacttgt tttacaaaca tatgtcggtg cttattaact gaagactgaa 1140 ggcaggttgt caaatagtaa ttaaaaagta gccagttcag tggtttttcc aatgactctg 1200 agcaagcgaa ggtgttccaa ccaacggaaa aagttgcagc tgccatcaaa ggcgttttgg 1260 acccaatttt geecaagtaa tttagaagca geatteetee eattgaaace eetgetgeea 1320 ggaaaggagc agaagggtac aggctgtgta catggtgaat aactgtctcc aagtcttcag 1380 tgttagcaca acaataagtc cttggcgtca agagattctc ccccgccact cctctgttgt 1440 taaaaaaccac acatctgtat cctaattctt cactaagatg gatcatatga aggatatatg 1500 actecttget tgttecegtg aggecaggea acaataagat agtaggtetg gtgetggeat 1560 ccatataaca cgtactgtta tcattatcaa accagtccag tgaaatctgt cctccatctg 1620 cagttttaat aagttcattc ctgtactgca ccgggggctt cgaagtgatg aaaaggtcta 1680 agcagggtct gtcctcgacc ctcccagcac cagaccgtcg ggtagtacgt ttctgtaacc 1740 acgggacagt ggtcttgaag gaagcggctg aaactctcac ccccggtcac taactggggt 1800· ttcttggcaa tgctgctcag gtagtagaag gcataagcga cgctgaagcc caggataagg 1860 gataageeea eeeeegagee gaagaaeeee aeeeggaett ggtgtteeag gtagagggag 1920 ageteceggg acaacateeg caggtecatg gecaggeget geatggeece egagegege 1980 gegegggtee tgeggeggga ggagageegg etggegageg ggegagageg ggegagageg 2040 gacgcggcgc cgctgcctac tcc 2063

```
<210> 3464
<211> 5017
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5018)...(2724)
<223> similar to gill36418 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3464
ttttttttt ttggagggca aagacttttt ttttttaatt ggacttggct ttgatgagta
                                                                       60
totgacaaac cotgoagaca ctagtacaat ttgatogtaa acaaagtoot tgocagcata
                                                                      120
gtccagcaaa ttctgataaa acacatacaa aagttaagag acagctcgat ttcatcttcc
                                                                      180
tcccaacacc tgcaactgtt tccagatttt ctgtgtagtc ttctttgtgc tttcagttca
                                                                      240
gtaaaaatta gaaaggataa caaacttgta aagtcagata cctaattgta caaaattgac
                                                                      300
tagaccatgg agaaggggga agcatcattt tacaaaatat tgttaagatc accagcatta
                                                                      360
atttaaatta ttttcctttc tggacttcca agtccacttg gcaattttac ttaggaaaat
                                                                      420
atcatgcgta aatagaaaac cagtattcta aacacatttt ctttatgtga catattcttg
                                                                      480
tgcgtctatg taatgagaat ttttaaaaaa ttgttttctt cctgctgtca aaacttaggc
                                                                     - 540
attaaaaata agggactgta aacctagttg acttacccat aaaaaggagt aagttcggag
                                                                      600
aatgagagaa ggaccaatag aatctaagaa gcaccctgtc actcccagcc gggacctctc
                                                                      660
aggcatggtt ttgacaggag gtgcatttat aggacattca ctggttcctc agaatggaca
                                                                      720
gataatatag aaatgctagg aaaaaacatt cctgcaatag tctgcagaac aaatgtgcca
                                                                      780
gttttgcctt agatgtccta agacatctca acaatgttgg attatatggc ccgtttggct
                                                                      840
atatgaccca tetttaaage tgaaataaaa attgttagaa aaatatteta ggaagaatga
                                                                      900
aacttaaaaa aaaaaagaaa agttaaaact atttgctccc cttaattgtt tcactgtatc
                                                                      960
agttttggtt ctgaatggga tgtgaggatc ctatctaatg cagccattaa accacgcagc
                                                                     1020
caccacaget atgitgtacg taagactict cattacagtg acgattaaca gcacaagtte
                                                                     1080
attacttttt tcatggctca ttatgacaaa acgattacag agtaggcgaa gaacagagtg
                                                                     1140
ctttctcctc accagggcct tcatcagtga gtcaactgct cttgacgcca gcaagtcagt
                                                                     1200
ctgatgttcg caggtgaaac cccacccttg gctccatgaa tgaatgagac cgaggtaaac
                                                                     1260
ccaatgcaag ctctgcaacc ccaggggccg aagccacgtt gtccaaagcc atagctggga
                                                                     1320
ccttggagat cctggggccc tctgctgaaa ggcagcagtg gagaagggga ctggccgcgt
                                                                     1380
tttgctgaaa aaccgagget cetgtatggg gggcataacg ggaaggagge ggetttcact
                                                                     1440
tecaggeetg ageagagegt ggetggetgg gagagetgea egecageeeg aacegtgtge
                                                                     1500
ccgtgccctc tcaccgtgca gacggtagct gcggaagcca cggagaaggc gagcagcctt
                                                                     1560
ggcggctctc ctcaggagcc gctcactttg aatctgcacc ttctccagct ctcaggccca
                                                                     1620
ggtcagacac ttcctcaaac agatcaatga tccagcaatc gctgctcaaa agaaggcctt
                                                                     1680
atttctgttt ctccaacgaa agcctgagtg ccttccgccc gtgtttgtaa tgaacttaca
                                                                     1740
ggagaacggt ctgaactgta agtgcacgct tecgcatttg agaggaaagg tegetqagee
                                                                     1800
ggagcgcagg ctccagatgc gcaggcagcc tctagggaag atggggagct gccatggagc
                                                                     1860
cggtcaggca ggcagtgact cggctggaac gtggacggag agagagagaa acgggagcgc
                                                                     1920
aagggettgg aggaatgagt gtgeteeacg caaggacete agcagaagge teagcaeggg
                                                                     1980
gcggggtcct gggtaagagc cgggggctgc gctgggctcc cgggaagaca ctttgggctt
                                                                     2040
gccgtagagg taggaaaaca gggagggaaa ccgggtaggg ggaggagaag aaaaagcccc
                                                                     2100
cagaacgcag agcetettet tteeceacce etacetgtee acaececeag etgageacat
                                                                     2160
gtagaaaaac tatggtattg ctgattctgt gacaagaatc ttccccatcg gtaacctgcc
                                                                     2220
```

```
aaacacccac agaacatggc aatgaagccc tacatgcttt taaaagaaaa cagactgtta
                                                                     2280
agactaacag aaaccaactt agtacggcga atacggtaat gagtaccaaa ttccgcagaa
                                                                     2340
ctgagagete aacacaagtg cagttecace ttteattgtg ccagcageac tgattgattt
                                                                     2400
aaagttcaga tcaacgtgct ctcctcagct tcagagaggg tctcatttcc tacaccaatg
                                                                     2460
ggaatcactg aggttaccca aaaatgtaaa atcctggaga gctcaaacgc aaacatggtt
                                                                     2520
tgtagcaaaa gattcaacca agacgcccgc agccactaca gaggggccag gacgcagcag
                                                                     2580
cctgcgggca ctctcagaac ctcgtgcaca caacttatgg gaacttacaa aatcataaaa
                                                                     2640
aaaggcccca cattcttaaa ggtataattt atagcgcatt ctgtacaaaa gcagtctttt
                                                                     2700
acaagggact ctgctgctcc tcagaagaaa tccatagccc tgggccttct ccttggtgtg
                                                                     2760
gtggtcaggg gcttcttggc caccaggggt gagctggcag gtgagctggt gggggtcttc
                                                                     2820
agcaccccgt ggaagggctg tctgttcagg gtcgaaggcc actcgagaag ggcccgtggg
                                                                     2880
actgaccaag atactettgt etgtettett gaatteggea gteatgttte tgtteageee
                                                                     2940
aaaggtgact ttcttggagc tggatggtgt cttgtttagc tggacggcag ggcctggagg
                                                                     3000
gtgggtggca gtagctgctc ttgggtcttc tgaagaacaa gggctttggt aagaaagggg
                                                                     3060
tgttaaactt cacaaagtcg ctctctgccc tdaggttctg cttcttdagg gaactgcaag
                                                                     3120
teccaetget teccagagee tggggttgee cagettegga etecageace eegttgtget
                                                                     3180
ccaccaagtt tgacatcact ctcattttct tcctcttttt caaacttgct gttttctggc
                                                                     3240
tgggcaggcc acagagctcc aggctgccgg gccctgcctt cttttctgc agcctcctgc
                                                                     3300
gctggggcag cgtggtgtgg ctgttcgccc cctctgcggg gcctgtggga gggccttcct
                                                                     3360
getgeaatgg aggeeaggee ggegtggaea ggeeaetgee attgaeggge acaacteeaa
                                                                     3420
gtttccgctt cctttttagg agttgggctc cacctgtcgg ggaccctcta ggtccctgag
                                                                     3480
gatgactgcc actegggcca ctetgagaca tgtcctetgg gggcaacact getgattcca
                                                                     3540
acatttccct gtgggccctc gggctcttct tccgtggccg tttcctttta ttgtgcatgg
                                                                     3600
ggacggctgg aggatgctcg gagccactct cctccccagt gctggacgtg gcctctgcac
                                                                     3660
ctggctcggc cacacgtgcc ttcagggctt tcagcccaga ggcctcgggc tccctgccc
                                                                     3720
ggttctgttc cagggacggg gctgcacccc ctgggcctgg attttcaggc tgcaggtggt
                                                                     3780
gettettett ettettett ettetettt gaagaetget tteaetgtee tetteeteta
                                                                     3840
cacaaaagac tetgetteet tteteetttt ceaagttagt tttetetaaa agtttattte
                                                                     3900
ctttcttctt atgctttcct tgactgagga tttggtcatc ttcatcagca gaaatgtcct
                                                                     3960
ccgcaaaact gagttgagat atactgcttc cttcagaaag gtcttggaat ttcttgatga
                                                                     4020
gtttggagag gcgcttcctg ttgaagtggg gcgtgttctt cctgctggtc atttccaggg
                                                                     4080
agtogatoag caacagooot tatagtoaaa otgggagaag ggggoootgt gtoootcaaa
                                                                     4140
ggttccacag tcatctcttc ctctttcatc actgagtcca tcttttctgg aatggttttt
                                                                     4200
geocagtget gtettettt tactgacage tettetcaag gataceteat tttcaggtat
                                                                     4260
ctcctcagca gagaggtcac catcacccac ttttgtcttc tgttcctcca tcgtctcttc
                                                                     4320
aggcacaaaa ggagactgaa tctacgatag cttcgaagac accccgagct atggtctgta
                                                                     4380
ccagggtgtg gtccttcgtc tttgcagcaa ttttgcagaa tggatcgata aacttgagat
                                                                     4440
tctgatctgc taaaagctcc ttccccccga ctttggagag ttcatccagg taaatatcaa
                                                                     4500
tgaagtggaa teteacteea ttaggagaet gaeteteagg acacaggaee teetteatea
                                                                     4560
ggacatccaa gaaaaccttg attcggcttt cttcccagcc atttcgcttc aagacttcaa
                                                                     4620
aggactgcct caggaccaga cgaatcagca tatagtattt gtccaggcgt agcctgtcta
                                                                     4680
ttcctttcca ttctcgattc atggtttgcc aaaaggtctg aatgaacagg tgttgagccg
                                                                     4740
ctgagttgtt aacagcatgg actagctgtg caatggtgtt ggcgagctct tcctgtagaa
                                                                     4800
gttcttcctg actgaaacct cctgtctccc tctgcgtctt cacgctgatg tactggcgca
                                                                     4860
gettetteae egeteggtee eggatgeeet tetegetgga egecageege tgggeaaatt
                                                                     4920
ggatetegge eggetgeatg gegggggeea tegegeeege tggageatee eeggeegege
                                                                     4980
aacccgcggt gccgctgcag ccagccgagc gctgcgg
                                                                     5017
```

<210> 3465

<211> 4236

^{`&}lt;212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3648)
<223> similar to gi3882329 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3465

```
ctttgctaaa ggacagatca ccatgtggga tttggccagt ggaaaacttc taagatcaat
                                                                       60
aacagatgct catcctccag gaacagcaat attgcatatc aagtttacag atgatccaac
                                                                      120
tcttgcaatt tgcaacgaca gcggaggctc tgtttttgaa ttgacattta agagagtgat
                                                                      180
gggagtgaga acctgtgaat ctagatgtct gttcagtggt tccaagggtg aagtctgctg
                                                                      240
tattgageet etgeatteta ageetgagtt gadagateat eccateacae agtttteatt
                                                                      300
attggccatg gcatccttga caaaaatact ggtcattgga ttgaaaccat ccttgaaagt
                                                                      360
atggatgact tttccctatg gccggatgga tccttccagt gtgccactgc tggcctggca
                                                                      420
ctttgtagca gtacaaaatt atgtgaatcc catgcttgcc ttctgcagag gagatgttgt
                                                                      480
tcattttcta ttggtaaaga gagatgaatc tggagcaata catgttacta agcaaaagca
                                                                      540
tetteaceta tactatgace teateaactt tacetggata aatteacgca cagttgtget
                                                                      600
cttagacage gtagagaagt tgcatgtgat tgateggeaa acaeaagagg aattggagae
                                                                      660
agtggagatc tcagaagttc agctggtcta caatagcagc catttcaaat cactagccac
                                                                      720
tggaggaaat gttagccagg cactggcttt ggttggagag aaggcttgtt atcaatccat
                                                                      780
cagtagctat ggtggtcaga tcttttattt ggggacaaaa tctgtttatg tgatgatgct
                                                                      840
gaggagetgg agagagagag tggateatet eetgaaaeaa gattgtetta eagaagegtt
                                                                      900
ggctcttgcg tggtctttcc atgaaggaaa agcaaaagca gtagtgggat tatcagggga
                                                                      960
tgccagtaag cgaaaggcta ttgttgcaga ccggatggta gaaatcctat tccattatgc
                                                                     1020
agatcgaget etgaaaaagt geecagacea aggaaaaate caagtgatgg ageageattt
                                                                     1080
tcaggatatg gtgcctgtca tagttgatta ctgccttctg ctgcagcgaa aggatctttt
                                                                     1140
atttagtcag atgtatgata aattaagtgg agaattcagt ggccataggg gtatttttgg
                                                                     1200
gagtgccttg agccatatat tttaagtgga taaattggtg ggaatcacac cccaagtaat
                                                                     1260
gaaagacttg attgttcatt tccaagataa aaaattaatg gaaaatgtgg aagcgctcat
                                                                     1320
tgtacatatg gatatcacca gcctagatat tcagcaggta gttctcatgt gttgggaaaa
                                                                     1380
tegtttatat gatgetatga tetatgteta caacagagge atgaatgaat ttattagtee
                                                                     1440
aatggagaaa cttttcagag tcattgctcc tcctctgaat gcaggaaaaa cactaacaga
                                                                     1500
tgaacaagtt gttatgggca ataagctcct tgtatatatt agctgttgtc tagcaggtcg
                                                                     1560
tgcctatccc cttggtgaca tccctgaaga tctggttccc ttggttaaaa accaggtttt
                                                                     1620
tgaatttcta attcgcctgc attcagcaga ggcttctcct gaggaaagaa atccaaccct
                                                                     1680
tacaattccg ggacctttgg ctacattttg acacaagaga atttctcaat gtattggcac
                                                                     1740
tgacttttga agattttaaa aatgacaagc aagctgtgga atatcaacag cgaattgtgg
                                                                     1800
atattttgtt gaaagttatg gtggagaatt cagactttac cccctcacaa gtaggatgtc
                                                                     1860
tetttaeett eettgetegg cagettgeaa ageetgacaa caeettgttt gtaaacagaa
                                                                     1920
cactttttga tcaggtcctt gaattccttt gtagtcctga cgatgactcc cgacactctg
                                                                     1980
aaagacagca ggtcctttta gaattgctgc aggctggagg catagttcaa tttgaagaga
                                                                     2040
gtegaeteat eeggatggea gaaaaagetg agttetatea aatttgtgaa tttatgtatg
                                                                     2100
aaagagaaca ccaatatgac aaaattattg attgctactt acgtgaccct ctgcgagagg
                                                                     2160
aagaagtett taattaeatt cacaatatet tateeattee eggacacagt geagaggaga
                                                                     2220
agcagtetgt atggeagaaa geaatggate atattgagga actegtgtee etgaageett
                                                                     2280
gtaaagctgc ggagctggtt gccacccact tttctggaca tattgaaacg gtcattaaaa
                                                                     2340
aacttcagaa ccaggttttg cttttcaaat ttttgaggag tcttcttgac ccaagggaag
                                                                     2400
gtattcatgt aaatcaagaa ttactgcaaa tatctccttg tatcacagag cagttcattg
                                                                     2460
agetgttgtg teagtteaac ceaacceaag ttatagagae tetgeaagte ettgagtget
                                                                     2520
accetctega agaaactatt cagattactc agaagtatca acttcatgaa etcaccectt
                                                                     2580
atctattgga aaagaaagga gatattcatg gtgccttcct aataatgtta gagagactac
                                                                     2640
aaagcaaact tcaagaggta acacatcaag gtgaaaatac caaagaggat ccctcattga
                                                                     2700
aggatgttga agatactatg gtggagacca ttgctctttg ccagagaaat tcacataatt
                                                                     2760
tgaaccagca gcaacgtgag gccctttggt ttccgttatt ggaggcaatg atggccctc
                                                                     2820
```

```
agaagetgte cagtteagee attecteate tacaetetga agetetgaag tetttgacea
                                                                     2880
tgcaagtttt aaatagcatg gcagcattta ttgcccttcc atcaatcttg caaagaatct
                                                                     2940
tacaggatee agtttatgga aaaggaaaae ttggagaaat eeagggaett atettgggaa
                                                                     3000
tgttagatac ctttaactat gaacaaaccc tgctggaaac aacaaccagc cttctaaacc
                                                                     3060
aagateteea ttggteattg tgtaaeetga gagetteggt caccagagga etgaateeca
                                                                     3120
aacaagatta ctgctctata tgtttgcagc agtacaagag acgccaagaa atggctgatg
                                                                     3180
aaataattgt ctttagctgt ggccatttgt atcactcatt ctgcctacaa aacaaagaat
                                                                     3240
gcactgtgga atttgagggc caaacaagat ggacatgcta caaatgcagt tcaagtaaca
                                                                     3300
aagtaggaaa actcagtgaa aattcatctg aaattaaaaa gggaaggata accccatcac
                                                                     3360
aggtaaaaat gtctccatcg tatcatcagt ccaaagggga tcccactgct aaaaagggaa
                                                                     3420
cctcagaacc tgttctggat ccacagcaaa tccaagcatt tgatcagctt tgccgtctct
                                                                     3480
accgaggaag ctccaggctg gctctcctca cggaactctc ccagaatcgc agcagcgaga
                                                                     3540
gctataggcc attcagtggc tcgcagagtg ctcctgcttt caacagcatc ttccagaatg
                                                                     3600
agaacttcca gctgcagctc attcctccac ctgtgactga ggattgatga ctccatggag
                                                                     3660
cctggcccag gagaaccaga gatgatcccg aggcagctgg ggagaggccc cgcctctggt
                                                                     3720
gggcttggcc tccaccacct cccacgcttc tgagaagagg ttccaaattg ggcttctgtg
                                                                     3780
cccagagcgt ccacagcacc attcccagtg tagactccca gtcttctcca cattgctgtc
                                                                     3840
atggcgtcag ttcaccagac tcattgattt tgttttgctt gttaagcaaa ggaatgtcac
                                                                     3900
atacctetgt ccagettttt aggaaataca tttegeetat tgegaetttt tecatttace
                                                                     3960
ctgaagccta gaaagtaggt ggaactcaca caaatggcat tccagagtct gccatactcc
                                                                     4020
gtctcctcca gctgctggat aatacagagg aacttcaact tctacaggga acagtggttg
                                                                     4080
gccaggctgc agtataactg aagcatgcct tggagagagc agacactgtg ggggccaggg
                                                                     4140
ccatctccct ttaatgtgtt catgttaaaa cctatttgag tgtaagactt gccctttcta
                                                                     4200
acaataaatg ctccgtgttt(aagttcaaaa aaaaaa
                                                                     4236
```

```
<210> 3466
<211> 939
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (940)...(137)
<223> similar to gi2664429 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3466
cggccgcaag tgtttttgtt ttttttgttt tgtgattttt tttgtttttt tgtttttgcc
                                                                       60
cttcatggtc cgagaaggaa acggtggaag gtttcacatg gttccaatgc tgtaggtcgc
                                                                      120
cgcgggcccg atggtgtgat ggtacgggtc ggcagctgcg tagactctgc cgtaactgtc
                                                                      180
gctgtaggct gccgccgctg cagcgggctg agcgtatctg taggctgcgt agcctccata
                                                                      240
aateteagea eeataaaate cateetgata caegaceget eegtaagteg ggatgggggg
                                                                      300
tgggggtggc gcagcccgaa atgtattata cacggcccgg ccccggcccc gaagatgtgc
                                                                      360
gccccggtag gcaacggctg tgccggtggt ggggtagggg aaccccgtca ctgcatagaa
                                                                      420
ttcaggcccg tagactgcgc cgaccactgg atttagcttc cagccgttgg tgtaggggtt
                                                                      480
eccegtette ttgttggtea teacteggge egtggeatta ttgaeeteaa tttteegtee
                                                                      540
ctctacgatc gtcccattca gcttctcccg ggctcggtca gcatctgagc tagtttcaaa
                                                                      600
agttacaaac ccaaaaccct tggagccccg ctcgttaaaa atgatctcca cgtctaaaat
                                                                      660
ttttccgaat tgcccgaaca tttgccgcaa gtcggggtcc ctgaaccgga aggggatgtt
                                                                      720
ggagacgtgt agccgcttgg gctgctgctt ctctgtaggg tcggaggggt ggagcggctg
                                                                      780
```

```
gctgtccgtc tgtgccgcct cgtctgtctg cggcactgtc tgggtcccgg cgatgggctg 840
tgtgctggcc tcggagcctg gctgctcggg gtgggtctgt gctggtgtgt acagggtcat 900
gccatgctct gtggggaccg gggtctggcc ggagtagtc 939
```

```
<210> 3467
<211> 1520
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1523)...(667)
<223> similar to gi817954 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3467
ttttttttt tttgaaaaaa gatgtttatt aaacaacttt aattgtcata aaatgactaa
                                                                    60
aatgggtttt aaaaattaag gctcttctct ttctgtggat tgccagaaca atgtaaaaat
                                                                   120
aatatcaatc acccctgcta aacgttttgt tcctaaagtt aaatttcata gattcctaaa
                                                                   180
cattttatga ttaagataaa aaattggact ataaatgaca attcatggcc atctgtgctg
                                                                   240-
aacacacatt gatcaggtgt acaatattct aattgagtag ttaagcaaaa aatattccag
                                                                   300
ttaaagcata aattttaatt tcagcatttt aaagtcattg tttccccaca tggtcatgat
                                                                   360
tttcctaaaa ttgaaatagt ctaatacagg agcgctaacc ttggggactct atatactccc
                                                                   420
aggaggatga etgaettgge tggeaattag tttgattata tttttttaaa tgetetaagg
                                                                   480
taaattatca aatgattcag aattacatgg catgcagtat ccaaaattat ggctctgatg
                                                                   540
600
ctcccacgaa aaagaaaaaa gtcactacct attcaagttc tagatctggt gcagcattaa
                                                                   660
ggattaaaac ttaccacttt accaggeett ecceatgtge aaataaatee eteetgacaa
                                                                   720
geagigacia tacagictic aagaaatati agiacagica gictotoatg igotatoiti
                                                                   780
ttacatatca geggetetaa caagggaaca tettecatte gaggacacag gggegtteee
                                                                   840
agagttttag cagggtccgt tttggttttg gtaactagat tcagtttgtc actgctcttg
                                                                   900
ctagaaatgt gtcccatgct atgatttegc ttgtgatctt tctcgtggtg cctctccttc
                                                                   960
cggtcatgta gtgaaagtgt tgcaaatttg ctgaccccag aagcaatggc cccgtccatg
                                                                  1020
acactgettt tgetgecage atttgagaet getgaatgtg gaaggetgtt ggacegtgge
                                                                  1080
agaggaggeg gcacagagtt cocgggtgtt gtaacactgt toccattgct tocagcagga
                                                                  1140
ggactcgtgg cattcatgac atttgtgtgt gtccttgctc ttgagagggg ttggtgaggg
                                                                  1200
aaaaggatat ettetgtaag gteeeataaa eagagetgtg tgteetggee eaeggaacea
                                                                  1260
aaccgatacg tgacacttac ggggcggctg tetgtagagt teegtetgga gageetgeac
                                                                  1320
tgtgtactat ctgctcgatc tctgccaaaa tgaagaaggt cttggaagtc ctcatcgctg
                                                                  1380
ccactaaact ccatagggtc accttettet acactagtgg tataagggtc aaacgetaca
                                                                  1440
acactgaccc aggactetgt geoegtgegt actggetatt acteggeagt ctacaaagga
                                                                  1500
ccagactgtc accaagtcgt
                                                                  1520
```

<210> 3468 <211> 3999

<213> Homo sapiens

<220>

<221> misc_feature

<222> (4002)...(1682)

<223> similar to gi3327128 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 3468 tttttttgag ctgtagcact tttattgttc cttgtctctc tacccctgcc cagggtaagg 60 gcaaacgcct tccaagctgt ccaagggcac ccgcctggcc tggttaggtt ctcctagttg 120 cctgcagagg aatgactcca catggggctg gggagagaag ggggtaccac cttcctctc 180 cctggcagag cctggacacc agtacacaaa gagctgggcc cccaggttct gccctaccct 240 ttctgggcct tggttagggc tgtcttggcg gcaagaaggt gggggtcagc taggggtggg 300 gcacagcgtg gcacctgaag ggaatgctgg gatttgggat agaaggtggg atgtctctta 360 tggggaagag gaaagaaaga ggcttctgcc gaggctgaca tggaacttgc tgagatgggc 420 agaggcaagc tgggcagagg gcaggaagga ggagggacag gctggaggaa ggcagtgttg 480 gtgaagtggg gaggaaagga actggtagaa acagggctgt tcaagagaga caaacatggt 540 ccagtggcag gagagaggag aagcctggca agaaggggcg tagaaaggtg ggaacagctg 600 accaggagca getgatetga gecaageagt tecagggett tecagecetg ggtgtgetet 660 accepted tececeated coacetecta egtatedeag gadeegttge caceccaagt 720 cctggaaagc ctcccatagg tgtggcttaa cccatcagct cccaggcgcc ctcaccctcc 780 tgccgctgcc cagttggctt tactcaccct ctaccagcag ccgtgtgtgg gtgctgtcct 840 ggccggcctg agcagcagta agtgccttgg tccttaaggt caaacgtcat ggatgaccag 900 gctgtgggtg gggccgtggc tgcgcattta atacttattt cccgggcaca gttcggccc 960 ctcccgcage cagcacacgt ggcccccccg agcgggacac agtcaccttc cagcaccgcc 1020 cggcggccca ccagaacggt cttctcgcga ggggggtggc ggcacatctg gagaggcaat 1080 geetecaett ecagtagage cagggaetgg gegggeeeeg cetggaageg gaetteaeeg 1140 gcgtcctcgg cgcgcagctc gctaagcacc agaatgtgtt tcttcccttc ctgtcggatg 1200 eggaegeggg eteegggtet eagegggegg eeteegaget eeeagegeee egtggteteg 1260 accteegaca egggtgeact egaaegtage geegtegeet tegegggege teacegaceg 1320 cageteggag agtacegeca cagtacgete tggggeggag eeeggggegt gageggggeg 1380 gggcagaggg cagttaccgg tcacgcccc tccacgcccc ctttctagaa gcacgcgcgg 1440 teatcagggt ceggggaaga cageteegea agtetegege ceaaageagt geceageete 1500 cacateacee egtaceeace gegeaeggte aggeggaeeg gteeggegeg ggeegteece 1560 accgcgcage tgtaggteec ggcgteegag gggeegeage gtegeagetg gagaaggegg 1620 cgcgtgccga gggcctggag ccggagccgc gggctaggcg taagcgcgtt cccgtcgcct 1680 cacgetgage etggecaggg tgcgatcgtg gtggeteteg cagecgtagg tgccetggte 1740 ggccagtatg acaccatgga tgaagaggcg gtggatgtgc ccatcctggg ccatggacag 1800 gcgagagteg tggggcaggg gctgcccacc tcgcacccag cgcacggccc ccgctgcacc 1860 cacteggeet gtetecaett egagacaeae gteetggeet teetetgeee geacateetg 1920 caaccgccgt aggaacagca gctctgtctc tggggccctg gagtgacgac ggccccattg 1980 cgcagccagg tgacatcggc atctggtggg gagacttcac accggaacgt ggcatcatcg 2040 ccctcgtgga cagtgagtgg tgtcaggtcc gagaccagct tcaccagcag tggctcttcc 2100 acgctgacaa ggaagatgcg gctgtcctgg ggcgcatcgc acaggtactc cccagcgtcc 2160 cogetecgtg ecceetgeac ecgeageace tgeetggeec eggeetgete cagetgeace 2220 egeceetige tigecaging eleccegice tigiaccage glacagggee ecetggeecg 2280 gagaggtgca ccaccagete taggteeceg cetggggtge teegaaceet egtetggget 2340 gcctcgggag ctaccacccg cacagggggc tcagccacct ggacggtgaa gctgaggctt 2400 ggggctccgg gggctgctcc agactggcag gtgtagagcc ctgcatgggc tgggcctgca 2460 gcctggatgc agaggactcg gcgggggccc tcggcatgga gctctaggcc ctcgcctcc 2520 tgcacgggcc tcccattgtg gctccagacc acgggggcgc cagcccggga cagttcacag 2580 ctcagcacca ctggctcccc aggggccaca cagagcgggc ttggagttgt ctctagagca 2640 aggaactgca ctggaggctc tgtgacagtg acagtgaaga aggccgagtc atctccagca 2700

```
tcacatacaa actogococo gtootogggo tgagcagoag gtagcadoag goggoagogt
                                                                     2760
ggcccatece tetecageae cagggeeteg etetecteca ettecagece atcettgtae
                                                                     2820
cagegeacag gggeateete eegagaeagt teacacatea geaceacaea etecaaggte
                                                                     2880
acggcgatca aggtcacctc atcgcgaggg tatatgatcc gcactggggg ttctgtgacg
                                                                     2940
gtgacagtga aggaggccga ctcatcgtca atttcacaca agtactcgcc ggagtcctcg
                                                                     3000
agctggacag cgggcagcac caggcggcgg acagtgtctt ccttctgcag gagcagcgcg
                                                                     3060
gggeteteca edacetecte tecatecttg gtecagegea cetetgeeca gggeeggeat
                                                                     3120
ageteacagg teageaceae aegetecagg egeaeggetg ceacatacae ettgeegetg
                                                                     3180
ggatacacga tecaegagga gaegtetgtg atggtgaeag tgaagtagge acaeteatet
                                                                     3240
ccagcgacgc actgaaactc gcccccgtct gagggctggg tggcgggcag caccaggcgg
                                                                     3300
cgatggggcc ceteattete cageaceaeg aagteaetet cetecaeete etgecegtee
                                                                     3360
ttgtaccaac gcacaggggc gtcctcttcg gttccacctc acaggccagc atgacacact
                                                                     3420
cggaagttat ggcatgcacg aacacatgtt ctcgggggtc cacgatgtgc acgggaggat
                                                                     3480
cttggacagt gacgccgaag aaggccgaga ccccttctgt cctgcactca aactcgccac
                                                                     3540
tgtcctggac tttggcctca ggcaggatca gacggtgttt gcgcccatcc atcttcacca
                                                                     3600
ccagcaacte geteteetee acettetgee cateettgta ccaggttgee gggaagteea
                                                                     3660
cccttgagag ctcacaagtc agcaccaccc gctctgaggt tgtgaaggtc aacgacacct
                                                                     3720
tgtcctgggg gctcaggatg tgcaccgggc tctcttggat tgtgagggca gctgagtcct
                                                                     3780
gcacgccggg gcagctgaag ccgaccaggg caccgctgtc ctggtgcttg acggcatgca
                                                                     3840
ggatgagtet gtgetgeaga ecettetget etataeggta eegeagggee eeaggtteea
                                                                     3900
cctggccctc cggctcgtta ctcttgagct cttccccatt aaggaaccag gtaccctgga
                                                                     3960
tgatggtgga gagatcgagg gagaagacgg catcttccc
                                                                     3999
```

```
<210> 3469
<211> 2493
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1790)
<223> similar to gi5733824 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3469
atggccgaga gtggtgaaag cggcggtcct ccgggctccc aggatagcgc cgccggagcc
                                                                       60
gaaggtgctg gegeeeege ggeegetgee teegeggage ccaaaateat gaaagteace
                                                                      120
gtgaagaccc cgaaggaaaa ggaggaattc gccgtgcccg agaatagctc cgtccagcag
                                                                      180
tttaaggaag aaatctctaa acgttttaaa tcacatactg accaacttgt gttgatattt
                                                                      240
gctggaaaaa ttttgaaaga tcaagatacc ttgagtcagc atggaattca tgatggactt
                                                                      300
actgttcacc ttgtcattaa aacacaaaac aggcctcagg atcattcagc tcagcaaaca
                                                                      360
aatacagetg gaagcaatgt tactacatea teaacteeta atagtaacte tacatetggt
                                                                      420
totgctacta gcaaccettt tggtttaggt ggccttgggg gacttgcagg totgagtagc
                                                                      480
ttgggtttga atactaccaa cttctctgaa ctacagagtc agatgcagcg acaacttttg
                                                                      540
tctaaccetg aaatgatggt ccagatcatg gaaaatccct ttgttcagag catgetetca
                                                                      600
aatcctgacc tgatgagaca gttaattatg gccaatccac aaatgcagca gttgatacag
                                                                      660
agaaatccag aaattagtca tatgttgaat aatccagata taatgagaca aacgttggaa
                                                                      720
cttgccagga atccagcaat gatgcaggag atgatgagga accaggaccg agctttgagc
                                                                      780
aacctagaaa gcatcccagg gggatataat gctttaaggc gcatgtacac agatattcag
                                                                      840
gaaccaatgc tgagtgctgc acaagagcag tttggtggta atccatttgc ttccttggtg
                                                                      900
```

```
agcaatacat cctctqqtqa aqqtaqtcaa ccttcccqta caqaaaataq aqatccacta
                                                                      960
eccaatecat gggetecaca gaetteceag agtteateag ettecagegg caetgecage
                                                                     1020
actgtgggtg gcactactgg tagtactgcc agtggcactt ctgggcagag tactactgcg
                                                                     1080
ccaaatttgg tgcctggagt aggagctagt atgttcaaca caccaggaat gcagagcttg
                                                                     1140
ttgcaacaaa taactgaaaa cccacaactt atgcaaaaca tgttgtctgc cccctacatg
                                                                     1200
agaagcatga tgcagtcact aagccagaat cctgaccttg ctgcacagat gatgctgaat
                                                                     1260
aatcccctat ttgctggaaa tcctcagctt caagaacaaa tgagacaaca gctcccaact
                                                                     1320
ttcctccaac aaatgcagaa tcctgataca ctatcagcaa tgtcaaaccc tagagcaatg
                                                                     1380
caggeettgt tacagattea geagggttta cagacattag caacggaage eeegggeete
                                                                     1440
atcccagggt ttactcctgg cttgggggca ttaggaagca ctggaggctc ttcgggaact
                                                                     1500
aatggateta acgccacacc tagtgaaaac acaagteeca cagcaggaac cactgaacct
                                                                     1560
ggacatcagc agtttattca gcagatgctg caggetettg etggagtaaa teeteaqeta
                                                                     1620
cagaatccag aagtcagatt tcagcaacaa ctggaacaac tcagtgcaat gggatttttg
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aaccgtgaag caaacttgca agctctaata gcaacaggag gtgatatcaa tgcagctatt
                                                                     1740
gaaaggttac tgggctccca gccatcatag cagcatttct gtatcttgaa aaaatgtaat
                                                                     1800
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gaattetgtg etgttataaa caaacccaat atgatgeatt ttaaggtgga gtacagtaag
                                                                     1920
atgtgtgggt ttttctgtat ttttcttttc tggaacagtg ggaattaagg ctactgcatg
                                                                     1980
catcacttct gcatttattg taatttttta aaaacatcac cttttatagt tgggtgacca
                                                                    2040
gattttgtcc tgcatctgtc cagtttattt gctttttaaa cattagccta tggtagtaat
                                                                     2100
ttatgtagaa taaaagcatt aaaaagaagc aaatcatttg cactctataa tttgtggtac
                                                                    2160
agtattgett attgtgactt tggcatgeat ttttgcaaac aatgetgtaa gatttataet
                                                                    2220
actgataatt ttgttttatt tgtatacaat atagagtatg cacatttggg actgcatttc
                                                                    2280
tggaaacata ctgcaatagg ctctctgagc aaaacacccg gtaactaaaa aaagtgaaga
                                                                    2340
taagaaatac cccttaaagc tgagtaattc ctaattggta tggaatctaa cagcatcttt
                                                                    2400
gacaaacatc tcccagcaaa agtgccggtt agtcaggttt gttgaaaata cagtagaaaa
                                                                    2460
gctgattctg gttatctctt taaggacaat taa
                                                                    2493
```

```
<210> 3470
<211> 373
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(330)
<223> similar to gi5326854 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3470
gcctcataaa actctgcaaa tctaaggcca aaagctgtga aaatgacctt gaaatgggca 60
tgctgaattc caaattcaag aagactcgct accaggctgg catgaggaat tctgaaaatc 120
tgacagcaaa taacactttg agcaagccca ccagatacca ggcgagctga aggaaatcaa 180
gcaagatatc tccagcctgc gctatgagct tcttgaggaa aaatctcaag ctactggtga 240
gctggcagac ctgattcaac aactcagcga gaagtttgga aagaacttaa acaaagacca 300
cctgagggtg aacaagggca aagacattta gcagcccaca tcggcgtctg tgactctac 360
cagcattcca agg
```

```
<210> 3471
<211> 6076
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3242)
<223> similar to gi3947688 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3471
cctccaggcc cagaacggag ccgccttggc ctcggggtct ccctacacca acggtcctgt
                                                                       60
ccaaaatgca ttgctgtctt cacaagagtc agtgagccaa ggatacaatt tccagcttcc
                                                                      120
aggatectae ecteatecaa taccageaaa gaetttgaat ecagtetetg gaeagtetaa
                                                                      180
ctatggtggt tctcagggat ctgggcagac tcttaataga ccacctgtgg cctctaatcc
                                                                      240
agtgacacct tegetteata gtggteetge teecegaatg ceattacetg etteteagaa
                                                                      300
cccagctact acaccaatge cttctagtag ctttcttcct gaagccaacc tgccaccacc
                                                                      360
tttgaattgg caatataact atccatccac agcctcacaa acaaaccatt gtcctcgtgc
                                                                      420
atcateceaa ecaactgtat etggaaatac aagtttaace acaaateate aatatgttte
                                                                      480
ttctggatat ccttcacttc aaaatagctt cataaagtca ggtccttctg tacctccctt
                                                                      540
agtgaateca cetetgeeta caaettttea accaggaget ceteatggge cecetecage
                                                                      600
tggaggccca cccccagtga gggccctcac gcccctgaca tcatcatata gagatgtacc
                                                                      660 -
ccagccctta tttaattcag ctgtcaacca agaaggtatt acatcaaata ccaataacgg
                                                                      720
atctatggtg gtccacagta gttacgacga gattgaagga ggtggcttat tggcaacacc
                                                                      780
acagettaet aacaagaate ecaaaatgag eegaagtgtt ggatatteat ateceteett
                                                                      840
accacctggt tatcagaaca caacaccacc tggtgcaact ggagtaccac cctcttcctt
                                                                      900
gaattaccca agtgggccac aagcetttac teagaeteee ttaggtgeta atcatttaac
                                                                      960 .
cacaagcatg agtggattaa gtctacaacc agagggtcta agagttgtca atcttcttca
                                                                     1020
agaaagaaac atgcttccgt caacaccttt gaagcctcca gttccaaatt tgcatgaaga
                                                                     1080
catccagaaa ctcaactgta acccagagtt atttcgatgc acgctgacta gcattcctcc
                                                                     1140
agacgcaggc cttattgaat aaagccaaac ttcctttggg gctgctgctt catcctttca
                                                                     1200
aagacttagt gcaattgcct gtggttacct ccagtacaat tgtgagatgc cgttcatgca
                                                                     1260
ggacgtacat caatccttc gtcagctttc ttgatcaaag gagatggaag tgtaacttat
                                                                     1320
gttategagt caatgatgtt cetgaagaat tettgtacaa eeetttgace agagtttatg
                                                                     1380 1
gagaacctca cagaagacca gaagttcaaa atgctactat tgagtttatg gctccttcag
                                                                     1440
aatacatgtt acgaccacct cagcctccag tgtatctctt tgtatttgat gtgtctcaca
                                                                     1500
atgcagtcga aactggatac ttgaattcag tttgccagag tttgttagac aatctggatt
                                                                     1560
tgcttcctgg caacactaga acaaaaattg gcttcataac atttgacagt acaatccatt
                                                                     1620
tctacggtct tcaggaaagt ctctctcaac ctcagatgct aatagtttca gatattgaag
                                                                     1680
atgtttttat acctatgcca gagaacttat tagtaaactt aaatgaaagt aaagagctcg
                                                                     1740
tgcaagattt actgaaaact ttgccacaaa tgtttaccaa gactctggag acccagagtg
                                                                     1800
cettgggtcc tgcactgcag getgeettta agetgatgtc tccaactggt ggtcgaatgt
                                                                     1860
ctgtctttca aacacaactc ccaactcttg gagtgggagc cctgaaacca cgagaggaac
                                                                     1920
caaaccacag gtcatctgct aaggatatac acatgacacc atccactgac ttctataaga
                                                                     1980
aattagcctt ggactgttct ggtcagcaag ttgctgttga cttattcctt ctcagtggac
                                                                     2040
agtattctga tttggcttct ctgggttgta tttctcggta ttcagcaggt agtgtctatt
                                                                     2100
actatecete ttaccateat cageacaace cagtecaagt acagaaatta cagaaggaac
                                                                     2160
tacagagata cettactegg aagattgget ttgaggeagt catgaggatt eggtgeacea
                                                                     2220
aaggtettte catteataet tteeatggaa aettetttgt taggteaace gaettaetgt
                                                                     2280
ctttgcctaa cgtcaaccca gacgctgggt atgcagtaca gatgtcagtg gaagagagtc
                                                                     2340
ttactgacac tcagttggtt tcttttcagt cagcactctt gtatacatcc agcaaaggcg
                                                                     2400
```

```
aaagaagaat tegtgtteat actitgtgtt tgecagtagt ttegaetetg aatgatgtet
                                                                    2460
ttcttggagc tgatgttcaa gcaatttcag ggttattggc caatatggct gttgacagat
                                                                    2520
ctatgactgc cagtctgagt gacgctcggg atgctctagt gaatgcagtc attgactccc
                                                                    2580
etttcagett accepttett cagtettaag taaccagcag cetggaetca tggtteettt
                                                                    2640
ttetttgegg etttteecae tttttgtgtt ggeteteett aaacagaaat catteeagae
                                                                    2700
tgggacaaat gcacgtctag atgaacgcat ttttgctatg tgtcaagtga aaaaccagcc
                                                                    2760
ccttggttta ccttatgctc acaactcatc ccagtttgta tagagttgac aatctctcag
                                                                    2820
atgagggage acteaacate agtgatagaa ceatacetea geceecatt etteagettt
                                                                    2880
cagtggagaa gctgagcaga gatggagctt tcctcatgga tgcaggctct gtactgatgc
                                                                    2940
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                                                                    3000
atgeateaat teeacageet atgacagaee tteeagaaet tgatacaeea gaatetgeea
                                                                    3060
gaataatagc tttcatctct tggcttagag agcagagacc atttttccca atactttatg
                                                                    3120
taataaggga tgagagtcca atgaaagcaa acttcccttc aaaacatgat agaagacaga
                                                                    3180
acagaatetg cattatcata ttatgaatte etgttgeata tacageacea agtgaataaa
                                                                    3240
tgaatgaatg aagaaatttg acttatttt aaggaatgtc acgatagtgc agaatacctg
                                                                    3300
gaaatgtgta ataccttctt tttctattat gtttgtggga ctaatgtgat ggattgaggt
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gttcctcact gtgatttcaa caacctataa gcaaataaaa gaccacagca gagaatcaaa
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catgcaactc tgaaatactg tatttttcaa atcagaatat agctacgtat gattggatac
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                                                                    3540
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tttctgaatc tttggctgct acatttaaaa cctcacaaac ctaagtgttg cagggaagtt
                                                                    3660
acaaattgat tggtagtgat gtttttaaaa taaaaacaat ggaaagtaaa tataatgtag
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3780.
atgttgacta aaactaaact aattctagta tagcttgaga aaaatatgaa gaaacacatt
                                                                    3840
caagetttaa aatetgteag tattetttat gettgaagaa caaagteact ttgatttgaa
                                                                    3900
gtgagaacta tcattagggg gttttctgat ttcctgatga aaagttggac atactgtctt
                                                                    3960
aatctatagt gaaaagaatt tgagctgtct tcataaacac tgggactagc aatgataata
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gggagataag aaactttaat tatcttgatc ctttaagtgg attttatttg gtgcatttct
                                                                    4080
gctctgggta tataataaaa gtgggggttt ttggtgaaat gagtgaagaa atgaaaggtt
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tctadagtgc tatccadata catcagtaac atttttctaa ggagtttaat tgttaaattg
                                                                    4200
gaagtcattc ataagaaata tttatgcttg aatatgaaaa tctatgaaag cataaatgct
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                                                                    4560
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                                                                    4620
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                                                                    4680
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                                                                    4740
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                                                                    4800
attgaactgg aagttttett gaaagetget teatetatta agaageaatt tteaaattgt
                                                                    4860
agcgaattat attatcccct cttttaaaga aacagtcgtt atatgctgat gtttcttaaa
                                                                    4920
ataactaaaa tgttcctctt aatgtgattt taaatggagt tatttgtagg tcctttctta
                                                                    4980
gtagtaaaga atcttctaga gggaaacatt tgtgctttta gggataatct tccttgtgcc
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teactacate cetaagtggg tatgactett gttattacea catgettttt tagtatattt
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cacaaattta cttttaaata ttattttaga tacggtgtaa catgtgcaat tcagaataat
                                                                    5160
tttataacag gtcatgaaaa acataacttt agttaggatt cacaatattt gttctccaca
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                                                                    5280
ttgaatgtgt tttttagttt gattctttt ttttccccca atagggcact acctgccata
                                                                    5340
tcatcttgta ttactttttg atgtaaagcg actaatattt acactatgcc atatttttt
                                                                    5400
taattatagt tgtaaattat gaaagatcct tgaattttct acagatctac aactactaat
                                                                    5460
gtaacagaca agggcaatct tggtatttaa atctgagcat ggcagttcta ccataaaaag
                                                                   5520
tactetattt ttetaattte taggattttt aaaataacat ttetgtaagt etgacataet
                                                                    5580
aatagtcact caagcagtac catttatttt agtttgcata tattttcact gtttttaatt
                                                                    5640
taatgtattg agtctaatag gactgttttg caataattag gaataaagga tttatttctt
                                                                    5700
ctaatcaaag atgccataac cagcctatta tcctaggggg accccccaaa tgtgatttca
                                                                    5760
aaattttgtt aactattaca aatgtaatcc ttatatagaa attttaattt tgtaaagtag
                                                                    5820°
```

```
tgtataatat tgtaatatta aattettgtt ettaaattea aatatgtatt gatetteaat 5880 gtgetgtgtt aaatettget teetetgaaaa gttggagaca agatttgtet teettttae 5940 agtttgtaat ttteaetgtt ttatteetgt taaaaaaaaa aaaaagteaa ttggtaeeca 6000 tggagaeeca tggttgaate tatgetaaet tateaeettg getatteaat aaagttaatt 6060 gaaaagaaaa aaaaaa aaaaaa 6076
```

```
<210> 3472
<211> 1492
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1495)...(80)
<223> similar to gi4689256 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 3472
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                                                                       60
cctcagcctc aggcgctagt gaggacacag gccgtcctcc ggcggggagc acggtggggt
                                                                      120
cagggtgctg tgtggtcccg caaagaggca gctgagcttg ggcctcaggt cgttccacac
                                                                      180
cttgctcatc tccttgtgcc cttggatctg agagttgacg aaggcgcgga ggatgtggga
                                                                      240
ggtgagggc aggtagacgt ggatgagctg cgtctcctgg tgcaggcagt acagggagaa
                                                                      300
gtagttccgc agetccatcg tetgaatcgc gtteteetgc tecacgatge gggaetccag
                                                                      360
ctgctccacg gactccgggc tcgcgggttc tgcgccggtg gcgctcatca tctgcctctt
                                                                      420
catcaggetg tactitigtge aagggeeege tggtgettig tgeaacaege cetteteatg
                                                                      480
geogettege acaggteett aataggactg geageagate caagaagagg tteagettet
                                                                      540
ccaccaacgt cgttctcctc cctgcttacc ctgttgtgca gccttgtcgg cgaagcagcg
                                                                      600
caaatttcca cagacaggee tttcagagee tgettcaggg acceeccacg tgettgetat
                                                                      660
tcagagcggc ccaggagggc agcggggtcg tgtcagaccc tattgcactt agctccttcc
                                                                      720
cgaatatgag aagatetgee geattgtega tggeeegega egegateege teggeeetgt
                                                                      780
cgcgaagctt gtgaaagcta ttgtagatgt tccggatcag cttcccggct tgatggcaaa
                                                                      840
ctgagcctgg atgtcagctg ggaggaagtc cttggccctg gtagccagct tacagttcag
                                                                      900
gaattegtee eegacgeact gtgetgacte etttaacttg tteetgeaac atccequace
                                                                      960
cgctgaaagg aacaaggaaa aagcttgaag gaaccacatc cctcggaaga acagggggtg
                                                                     1020
tegegeceae ceaggitgae gaagegette agggetetee teetggeete gatgaactee
                                                                     1080
ctgtcagctc ccagcattct cttgggtggc/agggcaggca ccatacggta ggggaacttg
                                                                     1140
tgcaggagca tctcctggaa gaccacgaag tcattgtacc gtctgtatac cgaggacttg
                                                                     1200
aagcgctggc tggaaacctc atactccaca tgcttcagga agaggccctt cttctccgga
                                                                     1260
atgageteca cetgeacggt gtecetggee ageagetect geagggtgtg ggacageage
                                                                     1320
agegggttee cetgeggeat etgeattega etgggggetg ggaeetgetg cacgatggee
                                                                     1380
tggggctcga tggcctgggg tgtcggcaga tctgacgccg ggggatccgc ctcctcgtca
                                                                     1440
geeteegeet cagetgeege eeegaetgea geegeggea gegggteeat eg
                                                                     1492
```

<210> 3473 <211> 4696

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4492)
<223> similar to gi2815888 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3473

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```
2700
agaacagtto coottqaqtq cacaqtocat ttagagaaaa otggaaaagq attatqtqct
acaaaattga gtgccagttc agaggacatt tctgagagac tggccaggat ttcagtagga
                                                                     2760
cettetagtt caacaacaac aacaacaaca acaacagage aaccaaagee aatggttcaa
                                                                    2820
acaaaaggca gacccacag tcagtgtttg aactcctctc ctttatctca tcattcccaa
                                                                    2880
ttaatgtttc cagccttgtc aaccccttct tcttctaccc catctgtacc agctggcact
                                                                     2940
gcaacagatg tototaagca tagacttcag ggattcattc cotgoagaat accttotgca
                                                                    3000
tetecteaaa cacagegeaa gtttteteta caatteeaca gaaactgtee tgaaaacaaa
                                                                    3060
gactcagata aactttcccc agtctttact cagtcaagac ccttgccctc cagtaacata
                                                                     3120
cacaggecaa agecateteg acetacecca ggtaatacaa gtaaacaggg agatecetea
                                                                     3180
aaaaatagca tgacacttga tctgaacagt agttccaaat gtgatgacag ctttggctgt
                                                                    3240
agcagcaata gtagtaatgc tgttataccc aqtgacqaqa caqtgttcac cccaqtaqaq
                                                                    3300
gagaaatgca gattagatgt caatacagag ctcaactcca gtattgagga ccttcttgaa
                                                                    3360
gcatctatgc cttcaagtga tacaacagta acttttaagt cagaagttgc tgtcctgtct
                                                                    3420
cctgaaaagg ctgaaaatga tgatacctac aaagatgatg tgaatcataa tcaaaagtgc
                                                                    3480
aaagagaaga tggaagctga agaagaagaa gctttagcaa ttgccatggc aatgtcagcg
                                                                    3540
teteaggtag ceeteecat agtteeteag etgeaggttg aaaatggaga agatateate
                                                                    3600
attattcaac aggatacacc agagactcta ccaggacata ccaaagcaaa acaaccgtat
                                                                    3660
agagaagaca ctgaatggct gaaaggtcaa cagataggcc ttggagcatt ttcttcttgt
                                                                    3720
tatcaggctc aagatgtggg aactggaact ttaatggctg ttaaacaggg gacttatgtc
                                                                    3780
agaaacacat cttctgagca agaagaagta gtagaagcac taagagaaga gataagaatg
                                                                    3840
atgagecate tgaateatee aaacateatt aggatgttgg gagecaegtg tgagaagage
                                                                    3900
aattacaatc tottcattga atggatggca gggggatcgg tggctcattt gctgagtaaa
                                                                    3960
tatggageet teaaagaate agtagttatt aactacactg aacagttact cegtggeett
                                                                    4020
tegtatetee atgaaaacea aateatteae agagatgtea aaggtgeeaa tttgetaatt
                                                                    4080
gacagcactg gtcagagact aagaattgca gattttggag ctgcagccag gttggcatca
                                                                    4140
aaaggaactg gtgcaggaga gtttcaggga caattactgg ggacaattgc atttatggca
                                                                    4200
cetgaggtae taagaggtea acagtatgga aggagetgtg atgtatggag tgttqqetgt
                                                                    4260
gctattatag aaatggcttg tgcaaaacca ccatggaatg cagaaaaaca ctccaatcat
                                                                    4320
cttgctttga tatttaagat tgctagtgca actactgctc catcgatccc ttcacatttg
                                                                    4380
tetectggtt tacgaagatg tggetetteg ttgtttaaga aetteaacet caggacagae
                                                                    4440
ctccatcaag agagctactg aagcatccag tetttegtae tacatggtag ccaattatge
                                                                    4500
agatcaacta cagtagaaac aggatgetea acaagagaaa aaaaacttgt ggggaaccac
                                                                   4560
attgatatet aeggeeatga tgeeactgaa eagetatgaa egaggeeagt ggggaaceet
                                                                    4620
tacctaagta tgtgattgac aaatcatgat ctgtacctaa gctcagtatg caaaagccca
                                                                    4680
aactagtgca gaaact
                                                                    4696
```

```
<210> 3474
<211> 2915
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2202)
<223> similar to gi1657752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3474
gcagacacac acggacacac agagacacca gacacacata tacacatgca cacacagatg 60
cacacacatg cacacacatg cacagagaca cacagatgca cacacacacg atatgcagaa 120
```

aaaaatatgc	actaactaac	atccaggcgg	ccatgggcct	ctcggatcca	gctgcacagc	180
ccctgctggg	aaatggctct	gccaacatca	agctggtgaa	aaatggggag	aaccagctcc	240
gtaaggctgc	agagcaaggg	cagcaggacc	ccaacaaaaa	cctgagcccc	actgcagtca	300
tcaacataac	ttctgagaag	ttagagggta	aagagcccca	cccacaggat	tcctcgagct	360
gtgagatttt	accctcccag	cccaggagaa	ctaagagctt	tctaaattac	tatgcagatc	420
tggaaacctc	agccagagaa	ctagagcaga	accaaggcaa	tcaccatggg	actgcggaag	480
agaaatccca	gccagtccag	ggccaggcct	ccaccatcat	tgggaatggc	gatttgctgc	540
tgcagaaacc	aaacagaccc	cagtccagcc	ctgaagacgg	ccaagtagcc	acagtgtcat	600
ccagcccaga	aaccaagaag	gatcatccga	aaacaggggc	caaaaccgac	tgtgcactgc	660
accggatcca	gaacctggca	ccgagcgatg	aggagtccag	ctggacaacg	ttgtcccaag	720
acagtgcctc	acccagctcc	ccggatgaaa	cagatatatg	gagtgatcac	tcatttcaga	780
ctgatccaga	tttgccgcct	ggctggaaaa	gagtcagtga	cattgccggg	acctattatt	840
ggcacatccc	aacaggaacg	actcagatgg	gaacggcccg	tctccatccc	agcagatctc	900
cagggttcta	ggaaagggtc	acttagttct	gtaacgccat	ctcccacccc	agagaacgag	960
aaacagccat	ggagtgattt	tgctgttctg	aatgggggaa	agattaatag	tgacatttgg	1020
aaggatttgc	atgcagccac	tgttaacccg	gaccccagtt	taaaagagtt	tgaaggagca	1080
accctacgct	atgcatcttt	gaaactcaga	aatgccccac	accctgatga	tgatgattct	1140
tgtagtatca	acagtgaccc	agaagccaag	tgttttgctg	tgcgttctct	gggatgggta	1200
gagatggcag	aagaggacct	cgcccccggt	aaaagtagtg	ttgcggtcaa	caactgcatc	1260
aggcaacttt	cctactgcaa	aaatgacatc	cgagacacag	tcgggatttg	gggagagggg	1320
aaagacatgt	acctgatcct	ggagaatgac	atgctcagcc	tggtggaccc	catggaccgc	1380
agcgtgctgc	actcgcagcc	catcgtcagc	atccgcgtgt	ggggcgtggg	ccgcgacaat	1440
ggccgagaga	gggattttgc	ttatgtagca	agagataaag	atacaagaat	tttgaaatgt	1500
catgtatttc	gatgtgacac	accagcaaaa	gccattgcca	caagtctcca	cgagatctgc	1560
tccaagatta	tggctgaacg	gaagaatgcc	aaagcgctgg	cctgcagctc	cttacaggaa	1620
agggccaatg	tgaacctcga	tgtccctttg	caagtagatt	ttccaacacc	aaagactgag	1680
ctggtccaga	agttccacgt	gcagtacttg	ggcatgttac	ctgtagacaa	accagtcgga	1740
				catccaacaa		1800
ctgtcagtga	acatgaacgt	ggctgatgcc	actgtgactg	tcatcagtga	aaagaatgaa	1860
				tcatgggtgt		1920
gtccacacat	ttgccttcat	catggacacg	gggaaccagc	gctttgagtg	ccacgttttc	1980
				aggccgcctg		2040
				ttcgaccacc		2100
gcagattcag	taaccagaag	agtcacaacc	aatgtaaaac	gaggggtctt	atccctcatt	2160
				agctgcacat		2220
tcggctattt	acctgaagat	tgactagcta	cactaaagaa	aatgaactcc	gccatccgac	2280
cttccatcca	gttgctgatg	ctttgtcttc	agagaattta	cccttaacca	agcagtgtta	2340
				atgaaaagaa		2400
				tttttcttat		2460
gtgaacatta	cttaacttca	cacacacaca	gagaagagtg	tggccccacc	cctcctagtg	2520
aactaacgct	gcgtccttgg	aatgaatgat	gcgtgagtta	gtttcactgt	cttcttggct	2580
ggacctgtca	caagcaacct	ttaagtccta	cagcactttg	ccctgttttc	aacattggag	2640
taggcactgc	atagcagata	ccattgaatt	gctgtaaaaa	taggatggcg	agtttgtgtt	2700
				ggctgttggc		2760
aaaccaactg	gcagctttcc	ctgacaagct	ctttgacaca	tggacaccat	ttcatgtcta	2820
				attgatgaaa	aactaaattc	2880
gaggaattaa	aatcgaacaa	aacataaaaa	aaaaa			2915

<210> 3475

<211> 2429

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (2405)...(719)
<223> similar to gi4510377 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3475
ataacaaatt ttcccattcc caaggtttta aaaaacgccc ccggcccaaa ctttaaaatc
ccccccata aagaaaaaaa tattatttt cctcccccg taaaacttgg gcccccaag
                                                                      120
gattetttaa aacegeeece eetttttttt ttttttgaga tttaacattg tacattttat
                                                                      180
taaatactgg actttattac aacaaattaa tttacttccg atagaagttt cattttaaaa
                                                                      240
aatgtggttg tgttcaaatt cttaattgac acttgttttg gggtaaacat cctattttta
                                                                      300
ctggtggtat catcaatcat tatgagcaga aagattaatt ttgtaccaca qaacaaaqqa
                                                                      360
attteteaag tgggtacaat actteaatat atataaaggg gaatataete cecaaaggag
                                                                      420
tggggcatga ccacagcaga gtatatgatc agagaacata ttgcttttat ggtatatata
                                                                      480
tatatatata tatateteta catataaeat caagteatge acattaagte tttaetaeet
                                                                      540
actgaagget tetacettae acatgaaaat tgtteatgte ceagggtttg geatecagee
                                                                      600
aaaatttaaa caatgatgaa gaatggctgt caaactggct tttcagacca cccctgaaaa
                                                                      660
getgteaget gtaatateea teetggaate gtggeggaaa gtteetggga gttgeetttt
                                                                      720
cetgtgtttt gatcaagtet ataatagetg acagtactge acagtetetg gatttagtgt
                                                                      780
cattccagtc tacaggatga ggactttcaa tettetettg cagaagaata tetagtteet
                                                                      840
ttettaatte ettaacaaga tgggeaatte ttgetggaga etgaaataca atecaeteat
                                                                      900
ctacagcaat agtttcctga tcgttatcct tctggatgga aatgtcacct ccaaaaaaca
                                                                      960
agagacagta tggggaaacc tetgtgeagt catacaagta tatactgett gttetcatet
                                                                     1020
ttaggtgata gataagccag ttgtagtgaa agtctgtttg ctccacatta acagatttag
                                                                     1080
gatgaacagc aaccaggcca toggtttttg tgtaaacttt taccattttt ctttttttac
                                                                     1140
ccaaatttag tegaatttta gcaactttgg gatataaacc agcacagatg acagctttaa
                                                                     1200
ttatettete attatetgaa tttatattag attetggate tttaggattt etaetgetta
                                                                     1260
caaatccagc tccaagaaga tgctcagcaa actgtccttt catgttatgc agcatctgca
                                                                     1320
gtgtgtttga agacagaaaa tattcccagc aatagtcctt ttcgtatctg aaaccacgtc
                                                                     1380
gcctagcctc ttcccagccc tcaaacgcat tcacaactgt taagtgatca cttctagtat
                                                                     1440
cetttgccaa tteetttett ettgcatetg caafetttte tttteccagt ggaatgacaa
                                                                     1500
atggatettt gaaactgaga etageageaa tagtgagtae tgggtetaag eageagaaca
                                                                     1560
gtgctccaaa aagaatcatt tttccaatat gtggctcaac gggtaatcgt gccaagtgga
                                                                     1620
ctccaagagg tgtcaattct tcttgtttat ccaaagcgtt cagctccatc aggtgtctta
                                                                     1680
tggagagtaa cactgcctca tttgatggtg ggtccattaa tctactcaga aaataagcaa
                                                                     1740
ttccacctag ccttaaaatc tttatttgta aacaaagttc ttccaaagga gttctcaaaa
                                                                     1800
tttctggcag ttgatagtca tctagaagac ttgctctaag accattatac agatgatagc
                                                                     1860
aatgaccagg ttgaactett ecagetegae ettttetetg tttggeatta getttaetaa
                                                                     1920
cccactcagc ggacattgta ctgatattgt tctgagtatc aaaatqcqtc tcttttattt
                                                                     1980
ttcctccatc tatcacataa acgacatcat ctatggtaat gctagtctcc gcaatgttgg
                                                                     2040
tagcaattac tattttccga acaccaggag gggttctttt aaacacctgt gtctggttaa
                                                                     2100
ctgtaggcat cagtgaatgt aaaggtataa ttaaaaattt atctgattta aacattactt
                                                                     2160
gtgacatcaa gagatcatgt aaagtgctga tattgtccca gcctggcaga aagaccagta
                                                                     2220
tegeaceate etettettee aaaacaatgt ateggatgag ggeaacaate aaatteagat
                                                                     2280
caactttatc atcctccatc atttctataa catctacagt acttgcagaa taccttcttc
                                                                     2340
gcagttccct tacataatct ggccaacgtt ctttatatat tgcttctttt tcgaattcga
                                                                     2400
ccacacggac tagggatcta ctaatttta
                                                                     2429
```

```
<211> 3973
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3975)...(1294)
<223> similar to gi4914601 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3476 ttttttttt tttccttttc ttcagagttt attttgaatt ttcatttttg gataaccaaa 60 cagctcttta agaagaatgc ccagaagagt ccttctggca cttttggata gtacataaga 120 ttttcttttt ttttttaaa tttttttaa tagtcacatt cagctcgctt gctcaaacca 180 gacteceaca ttgggtgage aagatgagee cataggatte cagagttaat aegtaacegt 240 atatacaaac agccaaaaaa ccataatggt gccacaggga tggagcaggg aagggcatct 300 ctaacgtgtc ctctagtcta tcttcgctaa acagaaccca cgttacacat ggataactag 360 gagaggcaca ctgtgttgaa aacgagggat gctggacccc aaatgggcac ttgggcaggc 420 atgccagttt aaagcaaaag agacatcctt taataactgt ataaaatcca ggcagttcca 480 ttaaaggggt taagaaaacc aacaacaaca aaaagcgagg gactgtctgt tgtcactgtc 540 aaaaaggcac ttggagttaa tgggaccagg attggaggac tcttagctga tacagatttc 600 agtacgattt cattaaaagg cttggatgtt aagagaggac actcagcggt tcctgaaggg 660 agacgctgag atggaccgct gagaagcgga acagatgaac acaaaggaat caaatcttta 720 caaccaaatt gcatttaagc gacaacaaaa aaaggcaaac cccaaaacgc aacctaacca 780 aagcaaaatc taagcaaaat cagacaacga agcagcgatg catagctttc ctttqaqaqa 840 acgcatacct tgagacgcta cgtgccaacc taagttctca acgacagctt cacagtagga 900 ttattgtgat aaaaatgact caagcgatgc aaaaagtttc atctgttccc agaatccgag 960 ggagaactga ggtgatcgtt agagcatagc gacatcacgt gcggtttctt aatgtccctg 1020 gtggcggata cgccgagtcc tcggaaggac atctggacac cactttcagc cacctccttg 1080 caggggggac atccgccaaa gtcatccttt attccgagta ataactttaa ttcctttcta 1140 acatttacac ggcaaacagg aatgcagtaa acgtccacgt ccgtcccacg gctgggctgc 1200 egtteegttt cetecaegaa egggtaegeg ettecatgag aaaggatatt tggcaatttt 1260 atattccaca gtcaggtggg tctgcgatag ctcatttaat gttaaacgcc atcaggggcc 1320 tatetetace gattetgeea ggggetttte ttgtettete ettggteate ateateateg 1380 tetteetett eetegtggge agatettete tggtggggge tggetgetgg eteegagggg 1440 gcatccgcag tccgtctggt cgtctcctcc tgcaggctgg gcagctggcc accacttctc 1500 cgactcgacc cctccaacaa gcatcgcagg gcactgtcct cgggggtaca gaccgtggtc 1560 ccacattege taccactetg ttccacgtca tecaggtaca egagetgegt gtaggeegtg 1620 ctgtctgggg ctcgaggctc tttctgctgg tgctcttgga cgggcgggta gttctgctgc 1680 agagacaaag catctcccct tcccttccgg gctgattttg gttcattcat atctacgcca 1740 gagtccaaac tggcatcatt acttccgttc cttccagctc tttggagatc aatgtatgaa 1800 tgtctaacgt gagcgttgga cctgccatcc aaggagacga accacgcccg ggggtgcgga 1860 ageggettee caceecaag etecateagg geetttteag teaggagetg caceteactg 1920 ttcatctgag ccaaagccgc gtcgttcagg gaagctggga tggagagaga ctccgacatg 1980 gatgcgtttt gagggctcca ctcccgggtg cccgcatcct gcaggtgctg ctgagagatg 2040 gcctgggaag acaggggctg gggctggatc tgtgaggacg ggtgtgggaa gatcccggca 2100 tggggattgg acageteage etgtagtett tetateteaa getgetgate ageegggaeg 2160 acgaggget ggctgacata ggagtggtcc ccggggagtt tcatataatg agccgggatg 2220 accaaggcag gcagtacttt cctgtaaacg ctgtcattga cctggtcgac agaactgcag 2280 cagattaact ggccgggccg tgggaaggac gtaggtctct cgaggtgatc tactgatcgc 2340 gacatcatac attcagtggg tctgcggtcc agcagctgtt ctttctcagg tgatgaaggc 2400 gcggggtaca gatgttcctg aatggtgagt ttgcttcccg tggaggctgg accttctctg 2460 tectgetttt caaataaagg etgtgagage aeggtgttgt aactaeeeet gtagteatea 2520 ttgcccgagg actcgtagcc ttctctttcc atagattttc ttgcctttaa gggaaaaacc 2580

```
tecaetgaet tatggtagte ttteeecage gteecaettg gagtgaggtt atcaaaggag
                                                                     2640
atctggcttt tatcctcttc cttgcaagag aggagctcct cccgggagct aaattcctgg
                                                                     2700
gaggtgctgt aggagagctt gagcatgggg gtgtgcaggt ccccttcgcc gcccggagac
                                                                     2760
atcattteca aatggactee acteateagt teettegtge eggggggeete ggggeggeeg
                                                                     2820
tggctggtga cggacagcgg gccagggaat tctgacgctc ggcgtgaaaa cagcaagtta .
atgtgtgaca tggacgtgga ctggtctctt ttggaactct ccagtcctgc agggagctgc
                                                                     2940
agttttctgt ggtgctgacg aggtttcaag cacttcctcc tgcaataata taaaaqgaga
                                                                     3000
cccagcaaaa ccaaaagtat gaaagccatt cctcctaaaa tggccaaaag aaacaccgtg
                                                                     3060
tgatacgtgg taatgtcctg tgttacaacg ggacctggga tgggagggga catggcggcc
                                                                     3120
acccagtace ccaactgggg ggcaatgtat gtecaegtea getggetgee tteetggtge
                                                                     3180
acaagaccca gaccgetett cagecacgtt cecagettet ggtcaaaccq ccacqecqcq
                                                                     3240
acataggcat tgtgcctcag gctgctctgc gtggccaggg gcacagtgac atagatggga
                                                                     3300
ccatccacca gcaccggcgt tccattactg ctcagcaagt ggacgctgac ggctgtgact
                                                                     3360
ggggtcaggt catgcctggt gctgtttcct gttccatttc cgtctaatcc tcgcaaataa
                                                                     3420
ggaaaactgt ccacctccga aggggagctg gcggccgtga gaaacgcggt caggtcactg
                                                                     3480
tagetggtgt teteaggeaa eeteagagee ettetetgga aatgaaegeg aggetgtgge
                                                                     3540
cgggcacctt ggaatcctga tactatttgg acgacatctt catataccat tagagtggca
                                                                     3600
gagcgttctg gaagcaggcc aaggctcaga gaggaaaata caggtaaccg gattggcttc
                                                                     3660
catggggcag agtttggcac gtaggcatgc ttcgaggcgg tgacaatcaa ctgactgccc
                                                                     3720
agcttatact ggaacttgat aaaggcgacg ccatcagtcc ccgaggtgcc agaggctatg
                                                                     3780
gaggcctggt tggtgaagat ctcgatgagc gcatctgcta cgggctggtg ggtgctggcg
                                                                     3840
tegetgatgt geacetttaa egteacetet tgggeteegg egeegggete eegeagegte
                                                                     3900
ttggtcaccg ccttccagac gtggcagccc agcaggcaca gcagcagcgt cgcggacctg
                                                                     3960
ctcgtctccc ccc
                                                                     3973
```

```
<210> 3477
<211> 1459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1458)...(424)
<223> similar to gi3881654 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3477
ttttttttt ttttctaaag taataccttt attctggaga aaacaaacac ctccaaaaaa
                                                                       60
attotaaaag attttgagag gggaaaatat agacacacaa ctgcattcat totgatotto
                                                                      120
cacacaaaga tcaggtgaag aaatctatgc agctatacat gctaggacct gttgtacacc
                                                                      180
atccctgcaa ccccatagaa agaaaaaaaa ctcttttttc aaaatagaag cagtattctt
                                                                      240
ctacgaaaac aaaacaatca catgtgacta ctggaaatgt tagtgttaca cagagtcctt
                                                                      300
taaaaataaa tcacagccaa agttccataa agtacagaag cttgaaacag aaaataaaaa
                                                                      360
tegactegaa gagtgatgat gggageetga agetecatee teacaaggae ggeageetet
                                                                      420
ggacatcact gcaaaggtca caggaggaca gcttcacttc agagttgtaa cttctcaccg
                                                                      480
cetgteteet tggeteatag taateeacta tggacactga ageatettgg gtatttgaaa
                                                                      540
ctttaaagtt tctcacagca ggaatattaa cacaaaactg ggtttcattt acagaatcta
                                                                      600
aatagaggtt gagttttcca tgatcatatt ccactttctt cactgtctcq ctcaqaqaaa
                                                                      660
ttgcttctga aggcaccata aagccactta ataggttaac ttccataaga gccatgccac
                                                                      720
tectaceegg geeegaaaag ettgtacaca catteaaate cacatgattg agateatett
                                                                      780
```

```
tattttcttt tacagcaaca tctaaatcaa aggcttcttg attttggata gatcttcgtc
                                                                      840
ttctagaaga cccagaagcc ttcacattat atacaacatt gagctgacaa atagcaaatc
                                                                      900
caaaaccatt tgcggaaata ttacactgcc attggctgta ccatcagcaa gctctgctgt
                                                                      960
ctgaaggagt aagcggttgt gtgtgtcaat cagaaacttt acaggacttg gtgagctagg
                                                                     1020
eccegteacg greattigga tattigteet tietgtatte attagggetg caaatteaga
                                                                     1080
cagageettt aaageeacag tggtateetg agtagatgea aaaceaceca agetatttet
                                                                     1140
ttgcctgctt agccacctca taattgggat tccctcagaa gtctgaaatt gtaagaagtg
                                                                     1200
tgagagcagt gcataggctg caacttcaat atccagggag cgtggctgcc aggagtcaga
                                                                     1260
aagtttggac tetgatgaca eecagaattg catgecaeet tettgttetg etetecaagt
                                                                     1320
cagcatattc aaagcttcct tcgctttagg actccccact gatgacaatg cataagttat
                                                                     1380
aagggetaga gtataattgt etgaaattee tetaetgaat teagaeteea aaaaatggat
                                                                     1440
agactettge acctegtge
                                                                     1459
```

```
<210> 3478
<211> 2304
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2305)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(1053)
<223> similar to gi4884158 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3478 gggcgtcgcg ccctggggcc ggggccgggc ggcaccgcgg tgcgcaagcg caaccgtcgg 60 tgggtcgggg atcggtcgcc tgagaggtat cacctcttct gggctcaaga tggacaacaa 120 gaagegeetg geetaegeea teatecagtt eetgeatgae eageteegge aegggggeet 180 ctcgtccgat gctcaggaga gcttggaagt cgccatccag tgcctggaga ctgcgtttgg 240 ggtgacggta gaagacagtg accttgcgct ccctcagact ctgccggaga tatttgaagc 300 ggctgccacg ggcaaggaga tgccgcagga cctgaggagc cccgcgcgaa ccccgccttc 360 cgaggaggac tcagcagagg cagagcgcct caaaaccgaa ggaaacgagc agatgaaagt 420 ggaaaacttt gaagctgccg tgcatttcta cggaaaagcc atcgagctca acccagccaa 480 eggeegteta tttetgeaac agageegeag cetacageaa acteggeaac taegeaggeg 540 cggtgcagga ctgtgagcgg gccatctgca ttgacccggc ctacagcaag gcctacggca 600 ggatgggcct ggcgctctcc agcctcaaca agcacgtgga ggccgtggct tactacaaga 660 aggetetgga getggacece gacaacgaga catacaagte caaceteaag atageggage 720 tgaagetgeg ggaggeecee ageeceaegg gaggegtggg eagettegae ategeeggee 780 tgctgaacaa ccctggcttc atgagcatgg cttcgaacct aatgaacaat ccccagattc 840 agcageteat gteeggeatg atttegggtg geaacaacce ettgggaact eceggeacca 900 geceetegea gaacgaeetg gecageetea tecaggeggg ceageagttt geceageaga 960 tgcagcagca gaacccagag ttgatagagc agctcaggag ccagatccgg agtcggacgc 1020 ccagcgccag caacgacgac cagcaggagt gacgctgcct gctcccggtg tgaccgcgtc 1080 cttccctggc cgacccgaag gaagccttct ggttgtctgc cacttcctcc tgttggactg 1140 cctgagagag gggaagagag agacctcgga cctgcatgtc aagatggatt ttcccctttt 1200

```
atctetgeee teeteeacte cettitigta actecettae ageeeceaga eeettetiga
                                                                     1260
aacgagagee ageaagetga geacagaeea geagegaeet eeetteeage eeecagaaag
                                                                     1320
cteggteact tgagtgtttt ctagaateet ggggtgetee egggeegete teagagaagt
                                                                     1380
ggcaggtttc acgttcagcc gtgtggcgga tcgtgtggct tccaaagcct tttacagccc
                                                                     1440
ccgccccca tcccgtggtc tgtctgcagg aactctcccg tctgtgagaa gcctctttcc
                                                                     1500
gagtcgacct cccggccacc ccggccctgt gcctgctcgg aagagctcac tgccagctgc
                                                                     1560
ggcctgggca ccgcgggcca tgtgtgtttg catgaggaac tctttagtgg cagacaccta
                                                                     1620
agagacggct gcggtcaccc cacgcctccg cggctcagga gccgtcctgg gtgcatagga
                                                                     1680
ccagtttctg tgacttttct ccagttgggc atgttgacag acatgtttcc cctcctccca
                                                                     1740
ccctcatttt ctggtcctcg cgactgagag ccaggggcga catcatgacc ttctgtcccg
                                                                     1800
gccgccttag ccccgggcac agggaaggca gctgggccgt ttctgtctgt gtcccatcct
                                                                     1860
gctgtccttc tgtcctggat gtttcatggg cccggggccc ccccagggaa gcttaccct
                                                                     1920
cctgtgctgg gtggaggccc acgggacacc tccaggtgcc acccaccttg gcccttaaaa
                                                                     1980
cagcccaccc aggaaagcaa geegggagag eeeggacage aggeageett gtetgggtte
                                                                    2040
cttgaggcct gggggtggca gacgaagccc acggcgccgt ggtcccagca gcagggttgt
                                                                    2100
cagtcggagc atcctgggg ctccctggct cctggcccnt ctgtgaggta ggcgcagtac
                                                                    2160
cgtgtatcgt aggtagcagt aggaacgggg gccgccgcg gccctgcagc cgctcatggc
                                                                    2220
ggtgaggtgt gtgccaagcc cacceggggt gcagggcgtg acgtgtaaga gaacacctag
                                                                    2280
gcgttgtgac ctctgaaaaa aaaa
                                                                    2304
```

```
<210> 3479
<211> 1838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1170)...(656)
<223> similar to gi453376 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3479
cggaggggga ctgagatgct gggatcaaag aagggggagg tggtccccat atatccttcc
                                                                   60
tttctgaaac ccagggggga ataaaggaag aggggatgag agatgtgtgc tgttttaaca
                                                                  120
gctcaccctg ctaaggggcc ctaaagtgcc aagtcaagct gccagcctcc agagattaga
                                                                  180
attctatggt atttgaagat aagtgtgccg cagggggtag gagccagaac catagggcag
                                                                  240
cagtagagga ggagaaggga tttagaagac agtaatatat gattaaaagt taaaagctga
                                                                  300
tccagagcac atcagagtta caggttggaa agggggatct gccgatgagc aggaagtctg
                                                                  360
ctgatggctg gaaccgagta tgagaataac cetcaettta agagetgetg etgettettt
                                                                  420
tttgtctacc tttctggtaa agacaacatc aattttataa ggggagcaac agagggagaa
                                                                  480
540
caagecette agttatttea etagatttta aatgetttag atttttttt tgteetttt
                                                                  600
aacttttaaa tacaaagtot gagotgtooc atgooccaag tottootgto cactaaggto
                                                                  660
cggcagagtc tgaatcttca atcagaacct ctgtggtagc accgagtata tctgagttca
                                                                  720
taaccageee tteagtgeet ceaetgetge egetteecae aaagatette eeatcageea
                                                                  780
teaggeteae cegiteegte ecacigeagi aigaetitga catecetica getictaaca
                                                                  840
gtaggcactc tccagaggtt gagtttccca agggctcagg aagaagagga agaccctgac
                                                                  900
catctgaagg ctgcgtcagg gactctgggt tagtgcccaa gatatctgtg ctggtgatga
                                                                  960
gggcgcctgc attgggcagc cagagettet gcaatcagca cetcagggtg getttttgcc
                                                                 1020
ttgtgtgcca ctacgctgtc cttcttctca aattttttgc cacagatatt gcaagaaaac
                                                                 1080
```

```
tggtagaagg agtctgcatc atgtttcttc atgtgccaat taagagatgc cttttgtcga
                                                                     1140
caagtaaatc cacagatctc acatctaagg agaggagaaa aggaaatggc tgatccaaca
                                                                     1200
gagaaataaa gagtgctctt attcaggatc agggttagag tttagagcat atatatacat
                                                                     1260
acacacac acacacacac acacacacaa taatcagtaa catacttett ttgaaggatt
                                                                     1320
gggaaatgtt actagatgga aaactaatct gatcttcttc tgtttgcctg aaaaacagag
                                                                     1380
ggaaactaag aaaaaggcta ctaactaatg cccccaatca atatccactc atttatttga
                                                                     1440
tgaaagtaaa cagcagtggc aactaatatg tttgtaaagc ggcaaacctt caagtagggc
                                                                     1500
atatateett eteacecaga tgtteaceag taaataatae teactgtaat ggettetege
                                                                     1560
cagtgtgaat catccggtgc actgccagat tgtgggaact cttgaaggcc cgagcacaat
                                                                     1620
attcacagat ataatccctt tgatctatga agaaaatact gtggttagtg ttctatttag
                                                                     1680
ataccctgta aatattttcc cttacagtaa gtaagcagat gatggggcag gcaatttaga
                                                                     1740
gtaaaagcaa tgctgttttc aatgtataaa cactttgggt aaacaaaatt taaaaaagaa
                                                                     1800
aagtattgct ttaaaaaaaa tccaacattc ctcqtqcc
                                                                     1838
```

```
<210> 3480
<211> 3184
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (130)...(2367)
<223> similar to gi1336628 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3480
gettttatat ttgagettgt ttttcaagtg ataggagagt tgatgeagtt etaacgtaag
                                                                    60
tgtaattaaa gtaggctttt tgaaaaaata gtctgtggaa ttcttattac tgtttttccc
                                                                   120
ccctactttc agcttcattt acctcttaat tctcctttgc ctggaagtga attgaccaag
                                                                   180
gaacetttte gttgggatea gagaetettt geattagtgt tgeggttgee tggeaecatg
                                                                   240
tcagtagaat cagaacagtt gacaggtgtg cctttagatg actctgcaat cacaccaatg
                                                                   300
tgtgaagtga caggcggccg ttcatattct gtgtgttctc caagaatgct taatcagtgt
                                                                   360
ctggagtcct tggtgcagaa agtacaaagt ggggtggtaa taaactttga aaaagcagga
                                                                   420
ccagatectt cccctgtaga agatgggcag ccagatatat caaggccttt tggatctcag
                                                                   480
ccttggcata gctgtcacaa actcatatat gtcagaccaa atcctaaaac tggggttcct
                                                                   540
ataggtcatt ggcctgttcc agagtctttt tggccagatc aaaattcgcc aacactacca
                                                                   600
cctcgtacat ctcatcctgt agtgaagttt tcctgtacag actgtgaacc aatggttatt
                                                                   660
gataaacttc cttttgacaa atatgagttg gaaccttcac cactgactca atttatcctg
                                                                   720
gaaaggaaat ctcctcaaac atgttggcag gtgtacgtga gcaatagtgc aaaatacagt
                                                                   780
gaacttggtc atcettttgg ttacttgaaa gecagtacag cactgaactg tgtcaactta
                                                                   840
tttgtgatgc cttacaatta tccagtcctt cttcccctct tagatgactt gtttaaagtg
                                                                   900
cataaagcaa aaccaacatt gaagtggaga cagtcatttg aaagttattt gaagacaatg
                                                                   960
1020
atagcagaca gtatggaata tggacttagt tacagtgtca tttcatacct caaaaaacgt
                                                                  1080
gagtcaacag gccaaaatag aatctgatcg agtcattgga tctgtaggca aaaaagtagt
                                                                  1140
acaggagact ggaataaaag tccggagccg atcacatggt ttatcaatgg catataggaa
                                                                  1200
agattttcaa caactcctcc agggaatttc agaggatgtc cctcacagac tgctagacct
                                                                  1260
taatatgaag gaatacactg ggttccaagt tgctttgctg aataaggatt tgaagccaca
                                                                  1320
gacatttaga aatgettatg acataceaag acgaaatett ttggateaet taacaagaat
                                                                  1380
gagatetaat ettttgaaga geaetegeag atttetgaaa ggaeaggaeg aagateaagt
                                                                  1440
```

```
gcacagtgtt cctatagcac aaatggggaa ctaccaggaa tacctcaagc aagtaccttc
                                                                     1500
tecactaaga gaaettgate etgateagee aegaaggttg catacatttg geaaceeett
                                                                     1560
taagctggat aagaagggta tgatgataga tgaagcagat gaatttgtgg ctggacctca
                                                                     1620
aaataaacat aaacgacccg gagaaccaaa tatgcaaggg atccctaaaa gacgtcggtg
                                                                     1680
tatgtctcca ctactaagag gcagacagca gaatcctgtt gtaaacaatc atattggggg
                                                                     1740
aaaaggacca cctgcaccta caactcaagc acagccagat cttattaaac ctcttcctct
                                                                     1800
tcataaaatt tcagaaacca ctaatgattc gataatacat gatgtggttg aaaatcatgt
                                                                     1860
tgcagaccaa ctttcatcag acattacacc aaatgctatg gatacggaat tttcagcatc
                                                                     1920
ttetecagee agtttactgg aacggecaae caateatatg gaggetettg gteatgacea
                                                                     1980
tttaggaacc aatgacctca ctgttggtgg atttttagaa aatcatgagg agccaagaga
                                                                     2040
taaagaacaa tgtgctgaag agaacatacc agcatcttca ctcaacaaag gaaagaaatt
                                                                     2100
gatgcattgc agaagccatg aagaggtcaa tactgaacta aaagcacaaa taatgaaaga
                                                                     2160
gatccgaaag ccaggaagaa aatatgaaag aatcttcact ttactgaagc atgtgcaagg
                                                                     2220
cagtttacaa acaagactaa tatttttaca aaatgtcatt aaagaagcat caaggtttaa
                                                                     2280
aaaacgaatg ctaatagaac aactggagaa cttcttggat gaaattcatc gaagagccaa
tcagatcaac catattaata gcaattaaaa gaaaatagaa tgtggccact tatttcacta
                                                                     2400
tettetteaa atacaaagta aatacaagae tgttgtgate ttgcatteat tttetgacat
                                                                     2460
gcattgttgg ctatttgaaa tactaaaagc aaatctacag atcctttttc catcatttta
                                                                     2520
cagtgacctt ttcttcattt tggtttattt ttgtaatgtg aaaagtatca ctctaaaaaa
                                                                     2580
catttttaat ttaacaaact aaaaatattc ctccaaatct cttgcttgtc attgactctt
                                                                     2640
gcgtgtcaat ttccctcagg ttctattttc ttaaaccaac ctttaaaatt gtcacctctg
                                                                     2700
ttaaggttga actttgccaa aaaaaaaaga agttactttg taatttttgg ggaaaaaagc
                                                                     2760
acatacatta aaactaggta atgttttgta tatacagtta ttttggatat attattgtaa
                                                                     2820
gttgtacaaa tgtattttcg aagaatattt aagtacaagg cacttttgtt attccatcaa
                                                                     2880
taaatgctct attttactct tgtgtggttt aggaaataat cacatttaaa gctaatcatt
                                                                     2940
taaaaacatc ctaagataat ggaattttaa aggccttgct ttttagcatt ggaaaaatac
                                                                     3000
accacttgaa gttcatgttt gttaagccta actgtaatta catgttacat aatctgcatt
                                                                     3060
gcctttttac tatatgttcg tagtttttgt tggccatgcc aacatactcc catttctqcc
                                                                     3120
tagattatgg gaatgacttt gtatggggca gatagacaga tactttaaaa gctatttaaa
                                                                     3180
aagc
                                                                     3184
```

```
<210> 3481
<211> 2513
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(951)
<223> similar to gi437664 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3481

ggtaagccaa ctgaaatcta ctcaagacac cttaaaccaa atggaaaagt ttggaaaagt 60
acaagatgca agtgagaaat agcaaagctt ctttttgaca agttaaagat ggatgtttgt 120
cagaaagtgg atttacttgg agctagtcgc tgcaatatgc tatctcattc gctcactacc 180
taccagagaa cactgcttgg attctggaag aaaacagctc gaatgatgtc ccaaattcat 240
gaagcctgta ttggcttca tccgtatgat tttgtagctc tcaagcaact acaagacacg 300
ccaagcaaga ttagtgaaga caataaagat gaacaaatag gcggttttct tactgaacag 360
ctcaataagc tagtttgtc tgatgaggaa gcaagctttg agagtgaaca agcaaacaaa 420
```

```
gatcacaatg aaaaacattc tcaaatgaga gaatttggag cacctcagtt ttctaactct
                                                                      480
gaaaatgttg caaaagatct acctgtagat tcattggaag gagaagattt tgagaaggaa
                                                                      540
ttctcatttc tgaacaacct cctaagttct ggttcttcaa gtactagtga atttacccaa
                                                                      600
gaatgccaga ctgcctttgg gagccccagt gccagtctca catcccagga gccttccatg
                                                                      660
gggtctgagc ccctcgctca ttcttctcga ttccttcctt cacaactctt tgaccttggc
                                                                      720
tttcatgtgg ctggagcgtt caacaactgg gtctcccaag aggaatcaga actttgtctt
                                                                      780
teacacactg ataaccagee agtgeettea cagagteeaa agaaattaac aagateeeee
                                                                      840
aacaatggca accaagacat gtcagcctgg ttcaatctgg ttgcagactt ggatccactt
                                                                      900
tcaaacccag atgctattgg acactcagat gatgaacttc ttaatgcttg actgaagtta
                                                                      960
taatgtcact tcagtggcct tgagacatca attttgcaac gtatttcctt cgtggaaagg
                                                                     1020
atttagattg taacccgcac acaaaagcac ggtgtttgtg aatataacac ctgtcagcca
                                                                     1080
actitagaca gatggtaaag accacatitg aataagtaca catciticat atcitggatt
                                                                     1140
tgcagctgtt ggtactatgt ggaaaatatt agaaacttct atgtggaaaa tattagaaac
                                                                     1200
tacagagttt gcgatattta gatactgaaa tttatgtcaa aataacggct aggaataatt
                                                                     1260
ctgtcaatat ggagttgagc ttatttcttt ggaaaccctt ttaagttgcc ttgctgqctq
                                                                     1320
tgagaatttt atatgtggat aacaaagata gatagatagc atgtaaattg ggttgtggtt
                                                                     1380
tggggtcagt ttttaaatga aatagtagcg aggaggattt tctgttttgg aaaacaccat
                                                                     1440
tagaaccaga ccagctttgt tttgggttag agagagtaag atttgagaac tcagtttgct
                                                                     1500
ttaatgaaat cacagagaaa cttggtactt gtttttcttc atttggaggc taaaatgtaa
                                                                     1560
tgttttttca ttcatacaaa ataatggaca ctccctaatt ccattattaa atcttgaagg
                                                                     1620
ggaagtagca ggataattaa tttgctaagc ccatcctctg cagaaacaga aaaatctatc
                                                                     1680
ttcccatctc ctaaaactca gaatgcacag taatacttaa ggcttgtaca agtgtcttca
                                                                     1740
gacccacttt ttcatacact tgctatatag tagtatgcag tatttatatt attcctgaaa
                                                                     1800
ataaaatgag gggagaatat tccctaagca actggcaata gtattcctga aatacctaga
                                                                     1860
aatttetate tgaatgaggg agacaettat gaacaeetta teettacata tatttgeata
                                                                     1920
cttatctcat attttgtgac ataattattt aacccagaat actttctggc agacatacag
                                                                     1980
aaagetetgt gtgateaata agggagtgte teatttttet aetteeetet ttetgtgggt
                                                                     2040
gacatgatct gaggttctat ttgattacta agcaaaatct gttaccccta cagggtttag
                                                                     2100
aacctaagta ttagagagga aggctattta atggaagtta gtgtaagctg ataaaaacgt
                                                                     2160
agctaccgta cacacacatc aatcactcaa tttcctgtcc ttttaaattg cccacccttt
                                                                     2220
aattttgaag caatttccca agtgtgtgtt tgttttatat ttgtcatcca gtccattgca
                                                                     2280
tttccataag aagacatttt gactggctgg gtgcggtggc tcacgcttgt aatcccagca
                                                                     2340
ctttgggagg ctgaggcagg cggatcacga ggtcaggaga tggagaccat cctggctaac
                                                                     2400
atggtgaaac cccgtctcta ctaaaaatac aaaaaattag ccaggcgtgg tggcacgtgc
                                                                     2460
ctgtagtccc agctactccg gaggctgagg caagagaatg gcgtgagccc ggg
                                                                     2513
```

```
<210> 3482
<211> 2867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . (1984)
<223> similar to gi3818572 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3482
cttcctcttc tccacgcagg cttcaacagg agatttatgg agaatagcag cataattgct 60
tgctataatg aactgattca aatagaacat ggggaagttc gctccagtt caaattacgg 120
```

```
gcctgtaatt cagtgtttac agcattagat cactgtcatg aagccataga aataacaagc
                                                                      180
gatgaccacg tgattcagta tgtcaaccca gccttcgaaa ggatgatggg ctaccacaaa
                                                                      240
ggtgagetee tgggaaaaga actegetgat etgeecaaaa gegataagaa eegggeagae
                                                                      300
cttctcgaca ccatcaatac atgcatcaag aagggaaagg agtggcaggg ggtttactat
                                                                      360
gccagacgga aatccgggga cagcatccaa cagcacgtga agatcacccc agtgattggc
                                                                      420
caaggaggga aaattaggca ttttgtctcg ctcaagaaac tgtgttgtac cactgacaat
                                                                      480
aataagcaga ttcacaagat tcatcgtgat tcaggagata attctcagac agagcctcat
                                                                      540
tcattcagat ataagaacag gaggaaagag tccattgacg tgaaatcgat atcatctcga
                                                                      600
ggcagtgatg caccaageet geagaategt egetateegt ceatggegag gatecactee
                                                                      660
atgaccatcg aggctcccat cacaaaggtt ataaatataa tcaatgcagc ccaagaaaac
                                                                      720
ageccagtea cagtagegga ageettggae agagttetag agattttaeg gaecaeagaa
                                                                      780
ctgtactccc ctcagctggg taccaaagat gaagatcccc acaccagtga tcttgttgga
                                                                      840
ggcctgatga ctgacggctt gagaagactg tcaggaaacg agtatgtgtt tactaagaat
                                                                      900
gtgcaccaga gtcacagtca ccttgcaatg ccaataacca tcaatgatgt tcccccttgt
                                                                      960
atctctcaat tacttgataa tgaggagagt tgggacttca acatctttga attggaagcc
                                                                     1020
attacgcata aaaggccatt ggtttatctg ggcttaaagg tcttctctcg gtttggagta
                                                                     1080
tgtgagtttt taaactgttc tgaaaccact cttcgggcct ggttccaagt gatcgaagcc.
                                                                     1140
aactaccact cttccaatgc ctaccacaac tccacccatg ctgccgacgt cctgcacgcc
                                                                     1200
accgetttet ttettggaaa ggaaagagta aagggaagee tegateagtt ggatgaggtg
                                                                     1260
gcagccctca tigctgccac agiccatgac giggatcacc cgggaaggac caacictitc
                                                                     1320
ctcctgcaat gcaggcagtg agcttgctgt gctctacaat gacacctgct gttcctggag
                                                                     1380
agtcaccaca ccgccctggc cttccagcct cacggtcaag gacaccaaaa tgcaacattt
                                                                     1440
tcaagaatat tgacaaggga accattatcg aacgctgcgc caggctatta ttgacatggt
                                                                     1500
tttggcaaca gagatgacaa aacactttga acatgtgaat aagtttgtga acagcatcaa
                                                                     1560
caagccaatg gcagctgaga ttgaaggcag cgactgtgaa tgcaaccctg ctgggaagaa
                                                                     1620
cttccctgaa aaccaaatcc tgatcaaacg catgatgatt aagtgtgctg acgtggccaa.
                                                                     1680
cccatgccgc cccttggacc tgtgcattga atgggctggg aggatctctg aggagtattt
                                                                     1740
tgcacagact gatgaagaga agagacaggg actacctgtg gtgatgccag tgtttgaccg
                                                                     1800
gaatacetgt agcatececa agteteagat etettteatt gaetacttea taacagacat
                                                                     1860
gtttgatgct tgggatgcct ttgcacatct accagccctq atqcaacatt tqqctqacaa
                                                                     1920
ctacaaacac tggaagacac tagatgacct aaagtgcaaa agtttgaggc ttccatctga
                                                                     1980
caggetaaag ccaagecaca gagggggeet ettgacegae aaaggacaet gtgaateaca
                                                                     2040
gtagcgtaaa caagaggcct teetttetaa tgacaatgac aggtattggt gaaggageta
                                                                     2100
atgittaata titgaccitg aatccattcc aagtccccca aatttccatt ccitagaaag
                                                                     2160
ttatgttccc atgaagaaaa atatatgttc cttttgaata cttaaatgac agaacaaata
                                                                     2220
cttgggcaaa ctccctttgc tctgcctgtc atccctgtgt acccttgtca atcccatggg
                                                                     2280
ggctggttca ctgtaactag caggccacag ggaaggcaaa gccttgggtg cctgtgagct
                                                                     2340
catctcccgg gatgggtgac taagtaggct taggctaggt gatcagctca tcctttacca
                                                                     2400
taaaagtcat cattgctgtt tagcttgact gttttcctca agaacatcga tctgaaggat
                                                                     2460
tcataaggag cttatctgaa cagatttatc taagaaaaaa aaaaaaccga cttaaaatag
                                                                     2520
gggaagcaac taggaccaaa ttacagataa actagttagc ttcacagcct ctatggctac
                                                                     2580
atggttcttc tggccgatgg tatgacacct aagttagaac acagccttgg ctggggggtg
                                                                     2640
ccctctctag actggtatca gcagcctgtg taaccccttt cctqtaaaaq qqqttcatct
                                                                     2700
taacaaagtc atccatgatg agggaaaaag tggcatttca tttttgggga atccatgagc
                                                                     2760
ttcctttatt tctggctcac agaggcagcc acgaggcact acaccaagta ttatataaaa
                                                                     2820
gccattaaat ttgaatgccc ttggacaagc ttttcttaaa aaaaaaa
                                                                     2867
```

<210> 3483

<211> 1091

<212> DNA

<213> Homo sapiens

```
<221> misc_feature
<222> (15)...(798)
<223> similar to gi6002700 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3483
tttcgtagag cagcacccag cagcgccccg gggtccccgc gggaccgcgg ccactggacg
                                                                       60
gatacetegg agtggeggae cacaageeee tgaaaatgea etgeagggae tgtgeeetgg
                                                                      120
tgaccagete agggeatetg etgeacagte ggeaaggete ceagattgae cagacagagt
                                                                      180
gtgtcatccg catgaatgac gcccccacac gcggctatgg gcgtgacgtg ggcaatcgca
                                                                      240
ccagcctgag ggtcatcgcg cattccagca tccagaggat cctccgcaac cgccatgacc
                                                                      300
tgetcaacgt gagecaggge accgtgttea tettetgggg ceccageage tacatgegge
                                                                      360
gggacggcaa gggccaggtc tacaacaacc tgcatctcct gagccaggtg ctgccccggc
                                                                      420
tgaaggcctt catgattact cgccacaaga tgctqcaqtt tqatqaqctc ttcaagcagg
                                                                      480
agactgggca aagacaggaa gatatccaac acttggctca gcactggctg gtttacaatg
                                                                      540
acaattgcac tggagetetg tgacaggate aatgtttatg geatggggee cecaqaette
                                                                      600
tgcagggate ccaateacee tteagtacet tateattatt atgaacettt tggacetgat
                                                                      660
gaatgtacaa tgtacctctc ccatgagcga ggacgcaagg gcagtcatca ccgctttatc
                                                                      720
acagagaaac gagtetttaa gaactgggca eggacattea atatteaett tttteaacea
                                                                      780
gactggaaac cagaatcact tgctataaat catcctgaga ataaacctgt gttctaagga
                                                                      840
atgagcatgc cagactgtaa teecaggtat teaetgeate agacacegag acaetgaact
                                                                      900
tectgageca ecagacagga aagggtagea gaaaacaget teaeteetea ggaagtacea
                                                                      960
tggacagacg cctaccaggg gtgacaaagc agtgcagttg gattgtaagg aaaaattccg
                                                                     1020
gaattaatgc atcctaatga atgttgtccc cttcaatggt gttaccttaa gagctgaaca
                                                                     1080
ttcaattcag g
                                                                     1091
```

```
<210> 3484
<211> 1129
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(738)
<223> similar to gi994773 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3484
tcaagttcag gagacaggaa gcgaacggcg cgagaggaac aggatgcacg gcctcaacga
                                                                       60
cgctctggac aacttaagaa aagtggtccc ctgttattct aaaacccaga aactgtccaa
                                                                      120
aatagagact ttacgactgg ccaaaaacta catctgggca ctttctgaaa ttctgagaat
                                                                      180
cggcaagaga ccagatetge teacattegt ccaaaactta tgcaaaggte ttteccagee
                                                                      240
aactacaaac ttggtggcag gctgcttgca gctcaacgcc aggagtttcc tgatgggtca
                                                                      300
gggtggggag gctgcacacc acacaaggtc accctactct accttctacc caccctacca
                                                                      360
cagecetgag eteaceaete eeceagggea tgggaetett gataatteea agtecatgaa
                                                                      420
accetacaat tattgcagtg cgtatgaate ettetatgaa agtaetteee etgagtgtge
                                                                      480
cageceteag titigaaggte cettaagtee teececaatt aactataatg ggatattite
                                                                      540
```

```
cctgaagcaa gaagaaacct tqgactatgg taaaaattac aattacggca tgcattactg
                                                                      600
tgcagtgcca cccaggggtc cccttgggca gggtgccatg ttcaggttgc ccaccqacaq
                                                                      660
ccacttccct tacgacttac atctgcgcag ccaatctctc acaatgcaag atgaattaaa
                                                                      720
tgcagttttt cataattaat gaggaaaatg aaaataaaca gtggtcattc acctcccctg
                                                                      780
tetaattaag acaaaqeaga tgettgtggg etgaqtaatt ggeacaacte tatetaaggt
                                                                      840
gtttactagt ttctgaagtg tgtttcaact attgtgagaa ttttctatgt aataataaat.
                                                                      900
ctettttegt atgagaactt etttteettt cettttgtet gtgaageact gtgattetgt
                                                                      960
ttctactgga aagatttttt tctttttaat tttcttttaa acttatttaa tttgtttgaa
                                                                     1020
caaggtgtct aagaatatac tgttgaataa agacatgcac acagcataat tcaatqtcta
                                                                     1080
ttttggttgt acagtaatta taaaatgcat gttattaaaa ccagatgag
                                                                     1129
```

```
<210> 3485
<211> 884
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(507)
<223> similar to gi5771535 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3485 ataaccaaag ggcgtgcggt cgctggcagc gctggccctt gtcctggcgc tggccccggg 60 gettgeecae agecegggee aggegagaea eegegeeetg eegagegggg geeceeagtg 120 cggcttttca ccgaggagga gctggcccgc tatggcgggg aggaggaaga tcagcccatc 180 tacttggcag tgaagggagt ggtgtttgat gtcacctccg gaaaggagtt ttatggacga 240 ggagccccct acaatgcctt gacggggaag gactccacta gaggggtagc caagatgtcc 300 ttggateetg cagaceteae ceatgacaet aegggtetea eggecaagga aetggaggee 360 ctggatgagg tetteaceaa agtgtacaaa gecaaatace ceategtegg etacaetgee 420 cggagaattc tcaatgagga tggcagccct aacctggact tcaagcctga agaccagccc 480 cattttgaca tcaaggatga gttctgatgt tccccctgca ggagcaggtt cttgggagcg 540 tgaggcagga agacactagg tgctgaatct cctgcaaaac tggctgcctg gaggccctga 600 gecacceaga tetgaataaa acagatgett accetggaag agcaaatgee teetgttgte 660 cttggtcagg ggttctgtct acctggggac ccctgtctgc acaccaggga tcaataagag 720 ccaaagtggg acacctccta gatgtcagta tcagctggct gggcagtgga attttgagcg 780 acgetttact ttatactttt etgtgettga cagattttea gecatgacca tgtteaettt 840 . ataatcaaaa caaaaataaa ggtcccattt ttacaaaaaa aaaa 884

```
<210> 3486
<211> 6527
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<223> similar to gi5410204 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3486
atgeceeggg egactgeact tggggeeetg gtgteactge tgetgetget geegetgeet
                                                                       60
egeggegeeg ggggaetegg ggagegeeeg gaegeeaeeg eagaetaete agagetggae
                                                                      120
ggcgaggagg gcacggagca gcagctggag cattaccacg acccttgcaa agccgctgtc
                                                                      180
ttttggggag acattgcctt agatgaagat gacttgaagc tgtttcacat tgacaaagcc
                                                                      240
agagactgga ccaagcagac agtgggggca acaggacaca gcacaggtgg gcttgaagag
                                                                      300
caggcatetg agagcageec agacaceaca gecatggaca etggcaceaa ggaagetgga
                                                                      360
aaggatggcc gggagaatac cacactectg cacageeetg ggaeettgea tgeegeagee
                                                                      420
aagacettet eteecegggt eegaagagee acaaceteaa ggacagagag gatatggeet
                                                                      480
ggaggagtca tecectaegt cattggaggg aactteaetg ggagecagag ggecattttt
                                                                      540
aagcaggcca tgagacactg ggagaagcac acctgtgtga ccttcataga aaggacggat
                                                                      600
gaggaaagct ttattgtatt cagttacaga acctgtggct gttgctccta tgttgggcgc
                                                                      660
cgaggaggag gcccacaggc catatccatt gggaagaact gtgacaagtt tggcattgtg
                                                                      720
gctcacgagc tgggccatgt ggttgggttt tggcatgaac acacccggcc agacagagac
                                                                      780
daacatgtca ccatcatcag ggaaaacatc cagccaggtc aggagtataa tttcttaaaa
                                                                      840
atggaagetg gggaagtgag etetetggga gagacataeg aetttgaeag eateatgeae
                                                                      900
tacgcccgga acaccttctc aagaggagtt ttcttagaca ccatccttcc ccgtcaagat
                                                                      960
gacaatggcg tcaggccaac cattggccag cgcgtgcggc tcagtcaggg agacatagct
                                                                     1020
caagcccgga agctgtacaa atgcccagcg tgtggggaga ccctgcagga cacaacggga
                                                                     1080
aacttttctg cacctggttt cccaaatggg tacccatctt actcccactg cgtctggagg
                                                                     1140
atctcggtca ccccagggga aaagatcgta ttaaacttca catccatgga tttgtttaaa
                                                                     1200
agccgactgt gctggtatga ttacgtggag gtccgggatg gttactggag aaaagccccc
                                                                     1260
cttttgggca ggttttgtgg cgataagatc ccggagcccc tcggtctcca cggacagccg
                                                                     1320
gétetgggtg gagttéegea geageageaa catettggge aagggettet ttgeagegta
                                                                     1380
cgaagctacc tgcgggggag acatgaacaa agatgccggt cagattcaat ctcccaacta
                                                                     1440
teeggatgae tacagaeett ecaaggaatg tgtetggagg attacggttt cagaggggtt
                                                                     1500
tcacgtggga cttaccttcc aagcttttga gattgaaagg cacgacagct gtgcatatga
                                                                     1560
ctacctggaa gtccgggatg gccccacgga agagagtgcc ctgatcggcc acttttgtgg
                                                                     1620
ctatgagaag ccggaggatg tgaaatcgag ctccaacaga ctgtggatga agtttgtgtc
                                                                     1680
cgatggetet atcaataaag cgggetttge agccaatttt tteaaggagg tggatgagtg
                                                                     1740
ttcctggcca gatcacggcg ggtgcgagca tcgctgtgtg aacacgctgg gcagctacaa
                                                                     1800
gtgtgcctgt gaccctggct acgagctggc cgccgataag aagatgtgtg aagtggcctg
                                                                     1860
tggcggtttc attaccaagc tgaatggaac catcaccagc cctgggtggc cgaaggagta
                                                                     1920
teccacaaac aaaaactgtg tetggeaggt ggtggeeece geteagtace ggateteeet
                                                                     1980
tcagtttgaa gtgtttgaac tggaaggcaa tgacgtctgt aagtacgact ttgtagaggt
                                                                     2040
gegeagegge etgteceeeg aegeeaaget geaeggeagg ttetgegget etgagaegee
                                                                     2100
ggaggtcatc acctcgcaga gcaacaacat gcgcgtggag ttcaagtccg acaacaccgt
                                                                     2160
ctccaagcgc ggcttcaggg cccacttctt ctcagataag gacgagtgtg ccaaggacaa
                                                                     2220
cggcgggtgt cagcatgagt gcgtcaacac cttcgggagc tacctgtgca ggtgcagaaa
                                                                     2280
cggctactgg ctccacgaga atgggcatga ctgcaaagag gctggctgtg cacacaagat
                                                                     2340
cagcagtgtg gaggggaccc tggcgagccc caactggcct gacaaatacc ccagccgqaq
                                                                     2400
ggagtgtacc tggaacatct cttcgactgc aggccacaga gtgaaactca cctttaatga
                                                                     2460
gtttgagatc gagcagcacc aggaatgtgc ctatgaccac ctggaaatgt atgacgggcc
                                                                     2520
ggacagectg geteceatte tgggeegttt etgeggeage aagaaaceag acceeacggt
                                                                     2580
ggcttccggc agcagtatgt ttctcaggtt ttattcggat gcctcagtgc agaggaaagg
                                                                     2640
cttccaggca gtgcacagca cagagtgcgg gggcaggctg aaggctgaag tgcagaccaa
                                                                     2700
agagetetat teccaegece agtitgggga caacaactae eegagegagg eeegetgtga
                                                                     2760
ctgggtgatc gtggcagagg acggctacgg cgtggagctg acattccgga cctttgaggt
                                                                     2820
tgaggaggag gccgactgcg gctacgacta catggaagcc tacgacggct acgacagctc
                                                                     2880
agegeeeagg eteggeeget tetgtggete tgggeeatta gaagaaatet actetgeagg
                                                                     2940
```

```
tgattccctg atgattcgat tccgcacaga tgacaccatc aacaaaaaag gctttcatgc
                                                                    3000
cogatacacc agcaccaagt tocaggatgo cotgoacatg aagaaatagt gotgatgtto
                                                                    3060
3120
ttgaaaatct gccctaaaac agtgtacagt atttttctca aacaaaaact cagaatccag
                                                                    3180
ccttagaggt atatatttga atgaaagtct tgtaagtttg gccaacaagg tggagagaaa
                                                                    3240
aatgttcttt tgcttctgtc tgcaatgtta tcattcatga actgttaaag tgttaaagat
                                                                    3300
taggattgaa gtcactgacc attccggcta tgcttcttca taccattctc cttgtccctt
                                                                    3360
gctcctatgt ggcaaaaggt cagccttggg gttggccgtt cctctaatct ggacttgctt
                                                                    3420
gcaaaggtgc caggctgtct tctgtccatg ttgggcataa gggatgaaaa cttggccgag
                                                                    3480
actaatgtgt ggcccacagc titggctgga atcattttct ttctctctgc cagggacatg
                                                                    3540
tcaaccaaga aacctgaaaa tatggatgga tgtcaggact aaaaaaaggc atcacagtga
                                                                    3600
gcagtgagca cagagggagt ttcgagtata agaatcattg tcatgaagtt aggagaccac
                                                                    3660
aaagccattt ctcagagtca ttcactctcc ttgtcccttt ggtttccccc cctccctaat
                                                                    3720
tgcagtgggg gctaaggcat ccattatgaa tacagcagaa catttgctgg cgagagtcct
                                                                    3780
gtctgctgag aagacaatat tgtggctcgt cctgatattt tttcattcat tgactttgag
                                                                    3840
aagactccac ctgtgcttgg aattccatgg gcttcaaaga acatttcttc tttttagcttt
                                                                    3900
ggaggcactt gccgtggcac acctggactc cttgacatcc aattcaaact gcatttgcaa
                                                                    3960
aatgtgcaaa gacctcttat gagggaccaa ttcaggtccc ttatggggtg aacactgttg
                                                                    4020
aagactggtt aattataagt tatgtaagaa tcatcgcctt gtggaacaag tcaatcagtg
                                                                    4080
actagettee tgtagecaat caggttaaag agtgegttgg taactttget etgattaact
                                                                    4140
agtattcaat caccaacttg caaacagaat tcataacact tggcacttgt tctagagaag
                                                                    4200
tgtagaggat gatgtttaca taattttagc acctcaaggt ataatttaaa cagtgaggta
                                                                    4260
gttttgaatg gcatttcatt aaggcatcta tgggcattat gagctaaaag ctgtggtatg
                                                                    4320
ttagctttaa aagagtattt atgttggaat aatttttaaa taatgtttac ataactgtaa
                                                                    4380
gtcctgtttg gttgttgttg gacgcagggc ggcacatgag tgtttttggt tagagccaag
                                                                    4440
atagetecca tgeaceggaa tteetttggg atgaateage ateattttaa acaaagtata
                                                                    4500
tgtaaaaggt gaaaggttat attttttaca gatcagaatg tggcaccaga ggactgtgtc
                                                                    4560
tcattaaagt gattgctggg agcaaaaact agaatgatac aaagaaaggt cagagaaatg
                                                                    4620
catgggaata tttttcctt aaaacagaaa aaaattaaag tattattaat aatatatgtc
                                                                    4680
tgtatatatg tatgtatgta aaagatcagc tgtcaaagcc ttaatcaatg cagtgtggaa
                                                                    4740
aatgccaacc cctggtcctc gctttactgt gggccctgca ggactggctc tccatttcct
                                                                    4800
gcctctcctt tcaccaagct ctgttttggc ctttctcggc cctggactga ggctcagcct
                                                                    4860
acacgctcat attgtgcata tggcagaccc tgcccagcgt gcgctttgat acagcaaatg
                                                                    4920
gagcagctga cctcatggct ccaatcccac ctgcctgtta gggtagattc catttatctg
                                                                    4980
atttttgtat tttctgaggt tttatttggt ctcatcttgt ctatgagagt tgaaactgga
                                                                    5040
actgggaaac ctaagatggg tgttatggtt ctttctccaa ggaaataaaa attctgcagt
                                                                    5100
tttaaccttt agaagtctaa gcaagattaa caaatttcat agaaaagtgg gagggagtca
                                                                    5160
gaaacagagt tggtgctgct cagcaggacg gtgaaacaat gatacttctt tttatctctt
                                                                    5220
tagtatgaac attttcaaaa acacacagct tcaacaattg tcaccatatg gccaatttgc
                                                                    5280
aacaatggga ctcttatgaa aaacctttat ttaggccttc tgtgtgacgt atccacagaa
                                                                    5340
aagagaaget etgatteage tggggetage tgggeegete etetggaage ecacaettgt
                                                                    5400
ggggacttag gcatgacaca ggttcttgca aagaaactag aggctggctt cactagagag
                                                                    5460 .
agtocattca gcagaaagtc ccaggcctct gccttggtgc ttccaattat cagtgacctg
                                                                    5520
cctgcaagca tccccagaag caaacagcag aggtagaaga tatcactgca gcctgctttg
                                                                    5580
tgctttaatt gggtaccaag ctttggggat gacagtgagt tgcaagaata gttttagttc
                                                                    5640
agagaattgt cttaggacaa caggctaatg aaggatttgg ggtctgggtt tttagcctgg
                                                                    5700
ctccgttctg gtgtaacccg gtctagcaaa agctaagcct ggattgcagg gcaggaaaaa
                                                                    5760
atctggaatt aactttagcc agtggaattt cttcaaacag agaaagagag gctgttcatt
                                                                    5820
gatccactat tccctctatt ttcctctaag gtaaatattt agaggtattt acctgtaagg
                                                                    5880
tgaagtttee tttttattte taetttacaa ttteteteta aagcaagett gtecaaceet
                                                                    5940
tggcccagga cggctttgaa tatggcccga cacaaattcg taaacttttt aaaaaacatt
                                                                    6000
gtaagattct ttctgtgatt ttttttttc tcgtcagcta tcgttagtgt attttatgtg
                                                                   6060
tggcccaaga taattcttct tccaatgtgg cccagggaag ccaaaagatg ggacacccct
                                                                    6120
gctgtaaagt ttcatatcac tcatgaattg ctcagctgat ttaaataatt tgtaaaagcc
                                                                   6180
tgctaactag caaattcaca ttgagatttt ctattgattg ggtccctttg atagctttca
                                                                   6240
gattggtatt gttagcgttc catttgtgaa caaatgttcc cttggcttta gcagatgttt
                                                                   6300
ttaaagtttc ttttgtagac cgaacttctg aagagtaata ccaaatgcct aaaattttat
                                                                   6360
```

```
ttttaaaaag gaaaattgtt taaagtatta tatgtaaaca tatgggtatt ttttattttg 6420 tgtaatttta catttcatga aatgatgtca gtttcaaaga gaaagtggag aggacctaac 6480 atatgtctct acctagaaag gatggtttca ttaaagaatg tggattt 6527
```

```
<210> 3487
<211> 4380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4383)...(1310)
<223> similar to gi3882293 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3487
ttttttttt ttacttgaaa aaattcacat ttatttactg tcaaaccgtg ttaaacttta
                                                                     60
cactggatat tagtgatggg ctcattatta acaggtttac acaaagggat gaaaaaaaag
                                                                    120
cagaattttg ctgaaacaat ttacatttca ttagaacttt atcataaaat aaattaatta
                                                                    180
ctaaatatag gcagaaggaa tatggaagag taatatttat gttttatttt attttttaa
                                                                    240
aaaagaatag gcaccttttg ttcactagaa agtttgtgag aagtgcccag tgccctcttt
                                                                    300
gccctctgtt caagaataaa caggggtgac acacaatctt ttctagattt catcactttt
                                                                    360
gtgcaaggca tgacataact ggcttcaaag agtttgtttc tccccataaa acacgttctt
                                                                    420
ttggcaataa gaaatttaaa tgtaagtaat aaagactaac tttgtcaaag cagaacactg
                                                                    480
tatacagtgg aaaagaagtg aaaatgagta gaacttacca tgacaaagtg taagaaaaaa
                                                                    540
catttcataa catgtgcaac caagagcttt tcacaatatt ttcttcactc tttaaaatta
                                                                    600
ttttaatgac aattatattt cagttggaca caaatgtatt tattttaccc tagcaataga
                                                                    660
acaaaatata atttctttag ccatttttca tgagaatagt tcattgtaca gttgaggaaa
                                                                    720
catatgaaat aaggeetgtg gettgattge tagtggttaa geatgtttte aatetttgee
                                                                    780
ttaatgtaaa agatttgcag tgaactgcaa actgatgcag gaatatctct cctgcttttc
                                                                    840
caagtettgt caggaatagg taagggtaca ggtaaatttg teecacaggg attttaaage
                                                                    900
ctacgtcttg gtatataata caatggcagg gccctacaaa aatggtgcag ccatatttac
                                                                    960
1020
cacaatttcc tectaaacag cageagaate ettaaaatae eetggetgge atetetttte
                                                                   1080
tttgtaacaa ataattcact ttagtatact ctgtgtatat acaaagtttt tgtatgtttt
                                                                   1140
ataaaaattc acagaactgc aaggttcagt catcttttt acaccagaga accacaggtc
                                                                   1200
aagagtcatc tottcaagca gagtttgagg gagctgcgtc aggcccaatg gtgtctttat
                                                                   1260
ttattaaata ctcgcatgtg gccccttgga attccttagc tgtatgatta aagacttgta
                                                                   1320
accagetgea titgteette tetaacatet cettetggaa tacaceette titgttaatg
                                                                   1380
gggattatat aaccatcact attgcccctg ctgatctggt agcacatctg aagctgatgg
                                                                   1440
ccagctccaa gatttggcat gcttttatag taaatgtcct cattctcact cctcctggag
                                                                   1500
ggagagaggt cttcttccca tgtcagggct gctctccgga tagggagagt ctcctaagat
                                                                   1560
tgggcatgct tgtataaaga gagtctctgt tgggggactg taggtgatct tcagcctctg
                                                                   1620
ctgtcagttg ggagacatag ctgtcagttc cctcggactt cactttcttc tggggttggt
                                                                   1680
acagaaggga gtgagtccgc tgaggaataa gtggtgcctc gagttccttt gtgatggagc
                                                                   1740
teccageece tgggttgteg etgtgeatta aagatgaage atetgeeaca atageateat
                                                                   1800
cttcactgct gctacctcca atcacaggtt tgactggtag cgtgagctcg aggttgtgag
                                                                   1860
tettgetget geceegtaag tigtigigea etaatteiga aatgateatt tieteaaaag
                                                                   1920
cagtateatt cagaettagt ceaeagteea caaettgeae getgteatta tagteaecet
                                                                   1980
tgtgcagcga gtagctgttg ttaaaattac catttagcgg tagagtatcc atggcacttg
                                                                  2040
```

```
tatecetgge attgtteagt gaatgteetg gtgagttaaa tacaggaget gaaqqqqeat
                                                                     2100
tacatacaac tgtttcageg agcaatgtgt tataggggtt gttagtgceg tggggtegaa
                                                                     2160
gaagagggtt tgttagtagg taattgccag tcattccttg attaagtgtt gaagtgctat
                                                                     2220
tgatgtcacc tgagataaaa qaaqattctg attgttttct cacaqtatca ttccacattc
                                                                     2280
ttettataeg aetetgtgtg ceagaggaat agegageaet ggttetggtg gttgatgeet
                                                                     2340
tcactgaact gtggggactc tcagttggga ggcctccaca gcagtatgag tgtctgaagc
                                                                     2400
acttgccata ttettttegt aetttetttt ggagageaca gtgaaagatg aaaatgaaca
                                                                     2460
ctccctggaa agcattaaat atagtgaaga gatatgccat cacaatagtc tcctcattaa
                                                                     2520
taaaaagcaa cccaaaggac caggtgaggc caagaagaca cagaagagcg aaagcgccaa
                                                                     2580
gcacccaaga cttaatgttt tccaacctgc tagaatctgg tttcaaagtg tttgaatgct
                                                                     2640
tcaccatttt gcacaatgtg atcaccaaga agataatatt tagcagaata atgaaggtaa
                                                                     2700
caggiccaat gaagciccat ataaagtagi talcaacatg aagccagcaa gcttittctg
                                                                     2760
ttccataget ettatagtea atageagetg aaacteeaac caetgtggea ggaaacaagt
                                                                     2820
aaccagcaac atagtaatat tttttccttg aatattcact ttcaaaaact tcaactaaca
                                                                     2880
ttaggtagag ctgcacacct tctaggcaca tccaagcaaa agctgccaaa aaqaaaaaqt
                                                                     2940
gtagaagtcc tgcaaatatt gggcatgcaa tcgcatattt tgtcttatca atgcctatta
                                                                     3000
ggaaaataaa ttcagcaatg aaaaggttga tacaaaggtt cttgtgaata gtatttcggt
                                                                     3060
cactetgtag gecaeggaaa aagcagaagg tgaagatgca gatagecagg caaacaaggg
                                                                     3120
aaatgacaat tcccacccag gtgatgactg taagaagtaa ttcatgaacg ccatctttat
                                                                     3180
atgcaatttc cctgtgggcc atgagaattg caaaattggt taggtggctg catgcacag
                                                                     3240
ttgttcgagt tttattagtg tcaaccagct tgcagccctg ggtagaccaa tatcccatca
                                                                     3300
tagttetete tgagtagtte cagaaggage agtttgeatt gaaataattg teaggateaa
                                                                     3360
tgtgtggcag ggtaaaaagc acaggatcag tcaggtatac tcggctggac tctttattqa
                                                                     3420
ttgaaactga aatgacgtga gagttcactg caatggtgct attacgacca ataaaatcag
                                                                     3480
cacccagttt aatggttgca ttttctgtac taaggaactg tcccaggctc cggtaaatga
                                                                     3540
tgaacaccaa ctttgcaagc ccattcctgc tgttctgttt gacggtattt gcggacagtt
                                                                     3600
ggattgagct gcctgctcct ttgatgccca gaggaaattt aaagtcttgg atctgtcctt
                                                                     3660
ctgtactgag tacggcaact tccaggacaa tattttctgt gggcattgag accettgttg
                                                                     3720
gttctaaaag attgtcagct aggacaaaag ctccttcttc caatgtatcg agtaacattg
                                                                     3780
ttgcagtatg tgcttgttca gaagaattca tatgtttcca tgattccaaa gcttcaggtc
                                                                     3840
tcagaaggtt gtccactgtg tcaacaattg ccttaaggta agccctgcat gtcttctctc
                                                                     3900
gtttttggag cttgttataa ctccgtccag ctgaatcttt ttcactaggt ttcagttcct
                                                                     3960
gcagctgtgc atcaaggatg tccaccaact gctccatcaa tctcactgaa gaacttacat
                                                                     4020
ccccagcaaa cactggccct ttggtatgtt tagccagttc attggcaaga ctagcagcat
                                                                     4080
tttctccgct tctgatcttc tgagccagct gattcaccca gtgtgaggta cagttgctaa
                                                                     4140
gateggggee ettagggtte catgttecag tggaaateat geagagatat gaggeagtte
                                                                     4200
ctcttgttcc cttagggcat ggtcgttcaa ccatcattcc cctttgtgtc tgaggccact
                                                                     4260
ttatcccctt ggagtctaat gcttcacaga atctctctgg caggggaaaa atatttgtta
                                                                     4320
taggtggaat titggttgta gaaactgctg gaggtggttt tgtccctttg cttccttcct
                                                                     4380
```

```
<210> 3488
<211> 1224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1152)...(0)
<223> similar to gi3347848 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3488
tttttttcag atttaaaccg tctttatttc tacagcaaca tcttgaaaat agagagcagc
                                                                       60
egecteacce geaacagggg gagecetee tgecaccagg ggaccgtege egecectege
                                                                      120
gagaagaggg acgagggtgc cgaagggccg gcgagtgctt agtgttcttg gctctggggt
                                                                      180
ctggggaggc caggccactg agtctatggt ggagactcca gccggcacct cctgctggcc
                                                                      240
cgaacctagg gaagaggcc ctgctggaag gaataaataa gggatggagc tggagtgggc
                                                                      300
aggcccagcc tccagggctc aggctgagat gacaagggag aaggttaccc tgagattgaa
                                                                      360
cagaaaagac aggggctgtg ggagagacag gcgggacaag cagcaggccc atgcgcaggg
                                                                      420
ctggggtgag gggggtgtgc caggtgggcg ctctggtgac tggctgcccc ttcagcatta
                                                                      480
gcccaccagg gagcttcgtc gggagaggtc catggagctg gagctgagag tgcggctgtc
                                                                      540
agagagaect gtgeeteeag getgggtegg etetteeaeg etettgttga ggaagttgag
                                                                      600
ggaactggcc cgcttcatcc tggggttagg gggctcctgg ggggtgcccc cctgcagctt
                                                                      660
ctttaccage atctcactge tgegeeteag ggeateeegg agttteccaa aggaeeeget
                                                                      720
gcgcctcaag gagccactgc catccccatt ccactcagct gtaggtccca cgtcctcgag
                                                                      780
gtcagactca gaccgaggcc cggcaccccc agccatgtct cggctgctgc ggcggtctcc
                                                                      840
ccgcctgcca ctgccatctt tcagcagttc taccaccttg gtctggcttg cggggtccaa
                                                                      900
accetgaggg aggggcaggg gcatcaggca gtgaatggac cacacccagg gccacacagg
                                                                      960
tgtctgccca ccccctcctg catggagccc cacctgcttg cggttacggc tggcacagtc
                                                                     1020
ctctagtgtg tgcgcggctt ccagcttgcc ctggcgccgg tatagggccc ccaagctgcg
                                                                     1080
cagggtggtg ttgactgtgg ggctgtggat gggacagtct caaactccat gttcccccag
                                                                     1140
acccagggce cateetggca eccagedcae agtgggccet gaggaagcat ggaceteegg
                                                                     1200
ggtagccaga atccattcct tccc
                                                                     1224
```

```
<210> 3489
<211> 2647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2431)
<223> similar to gi5305411 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3489 atgaatgctg tgggaagtcc tgaggggcag gagctgcaca agctggggag tggagcctgg 60 gacaaccccg cctacagtgg tececettee ccacacggga cgetgagagt etgeaccate 120 tecageaegg ggeeteteea geeceaaeee aagaageetg aagatgaaee ecaggagaeg 180 gcatacagga cccaggtgtc cagctgctgc ctccatatct gtcaaggcat cagaggactt 240 tggggaacaa ccctgactga gaacacagct gagaaccggg aactttatat caagaccacc 300 ctgagggagc tgttggtata tattgtgttc ctggtggaca tctgtctact gacctatgga 360 atgacaaget ecagtgetta ttactacace aaagtgatgt etgagetett ettacataet 420 ccatcagaca ctggagtete ettteaggee ateageagea tggeggaett etgggatttt 480 geccagggee caetactgga cagtttgtat tggaccaaat ggtacaacaa ccagageetg 540 ggccatggct cccactcctt catctactat gagaacatgc tgctgggggt tccgaggctg 600 cggcagctaa aggtccgcaa tgactcctgt gtggtgcatg aagacttccg ggaggacatt 660 ctgagetget atgatgteta etetecagae aaagaagaae aacteeeett tgggeeette 720 aatggcacag cgtggacata ccactcgcag gatgagttgg ggggcttctc ccactggggc 780 aggeteacaa getacagegg aggtggetae tacetggace ttecaggate eegacagggt 840

```
agtgcagagg ctctccgggc ccttcaggag gggctgtggc tggacagggg cactcgagtg
                                                                  900
gtgttcatcg acttctcagt ctacaatgcc aatatcaatc ttttctgtgt cctgaggctg
                                                                  960
1020
gctgatccgc tatgtcagca actgggactt ctttatcgtt ggctgtgagg tcatcttctg
                                                                 1080
egtetteate ttetactatg tggtggaaga gateetggag etceacatte aceggetteg
                                                                 1140
ctacctcagc agcatctgga acatactgga cctggtggtc atcttgctct ccattgtggc
                                                                 1200
tgtgggcttc cacatattcc gaaccetega ggtgaategg etcatgggga ageteetgea
                                                                 1260
gcagccaaac acgtatgcag actttgagtt cctcgccttc tggcagacac agtacaacaa
                                                                 1320
catgaatgct gtcaacctct tcttcgcctg gatcaagata ttcaagtaca tcagcttcaa
                                                                 1380
caaaaccatg acccagetet cetecaeget ggeeegetgt geeaaggaca teetgggett
                                                                 1440
cgccgtcatg ttcttcattg ttttcttcgc ctatgcccaa ctcggctacc tgcttttcgg
                                                                1500
gacccaagtg gaaaacttta gcactttcat caagtgcatt ttcactcagt tccggataat
                                                                 1560
cctcggggac tttgactaca atgctatcga caatgccaac cgcatcctgg ggccctgccc
                                                                 1620
tactttgtca ccctatgtct tettegtett ettegtgete etggaacatg tteetgggee
                                                                 1680
atcatcaatg acaacaatat tcagaggtca aggaggagct ggctggacaa gaaggatgag
                                                                 1740
ctgcaacttt ctgacctcct gaaacagggc tacaacaaga ccctactaag actgcgtctg
                                                                 1800
aggaaggaga gggtttcgga tgtgcagaag gtcctgcagg gtggggagca ggagatccag
                                                                 1860
tttgaggatt tcacccaaca ccttaaggga actgggacac gcagagcatg aaatcactga
                                                                 1920
geteaeggee acetteaeca agtttgaeag agatgggaat egtattetgg atgagaagga
                                                                 1980
acaggaaaaa atgcgacagg acctggagga agagagggtg gccctcaaca ctgagattga
                                                                2040
gaaactaggc cgatctattg tgagcagccc acaaggcaaa tcgggtccag aggctgccag
                                                                2100
agcaggaggc tgggtttcag gagaagaatt ctacatgctc acaaggagag ttctgcagct
                                                                2160
ggagactgtc ctggaaggag tagtgtccca gattgatgct gtaggctcaa agctgaaaat
                                                                2220
gctggagagg aaggggtggc tggctccctc cccaggcgtg aaggaacaag ctatttgqaa
                                                                2280
gcaccegeag ceageceeag etgtgaceee agaceeetgg gggagteeag ggtgggcagg
                                                                2340
2400
gtgagattcc aacgttgcag aggagttaag tgtgaggcac tcccggagca aagtctatga
                                                                2460
aggatettet geaagagget geeteetggt ceaetgaace tggaaactga gtgggettta
                                                                2520
accaggagat aaaaatggag cctgaaggga atcaggcaag gaaatgaact caggattcag
                                                                2580
agatetttga attaatatgi ggtgggttet gaeattatte tteeataaga eeatgtgggt
                                                                2640
ttccatq
                                                                2647
```

```
<210> 3490
<211> 2354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (562)...(679)
<223> similar to gi3493529 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3490
attttgtatt tgcatatgac accaaagctg caaaacagga actaagcatg gtaataatgc 60
tggtcccaag gtgggccagg tatgaacact tccttctagg cctgctgcca ggaggagagc 120
tggcttattg atgggagcat tgtatgctgc tgaaacctcc ttacttgggg gttctcccca 180
gagacagaga agaaaaccta aggcaggcat tagtcttgga aaccagtacc agctagtatc 240
tcatgccaat gaaaagcatc ccatgatcac cctgagtcag acccaaataa ggggcagcag 360
```

```
agacagecag atgaageage aatttgaggg tagtaaetgg tgatgacaaa gecettetea
                                                                    420
attttacttt attaacttag ccaaggetta gtteetgttt tgeageetga tggaaattta
                                                                    480
atagatcatt tgaagtatgt aatcacctga catgctaagt gtctgtgtgt gccggagaca
                                                                    540
cagaatggca acctgacccc accctgtcct tgtctaggaa acacgctgga gaagaaaggt
                                                                    600
ggcaaggagt ttgtggaagc tgtcctggaa ctccggaaaa agaacgggcc cttgggaagt
                                                                    660
agctggaggt gaggtgggaa agccaccgtg cttatctggt tgtgacacat gcagtattag
                                                                    720
gaaagccatt ttgtgagagg gcttagaatt cagaggtgtg tggcagcaca gccgcatctt
                                                                    780
caagatggag gccaaggaca gcctgtagct ttacatctta gagtttcacc acatgcaggt
                                                                    840
tgtctgggaa aatcaccttt gcattttttt ttattactta aaatagctcc tatatgtttg
                                                                    900
atgtctagat cacaaatttt aagaaattat aggagctgag tttggtacat ctaagagctg
                                                                    960
agagtgagtg atactgagcc atctgcaaaa ctgctggtga gagatacaaa ttaaaaatct
                                                                   1020
tcagccatct gtgtgtgtaa gaggaaacat ataaatacac atttctcatt tgccaattac
                                                                   1080
accttccctg gtataagggg aagaaaacga cttggcatct gatgtgggga gaattattgc
                                                                   1140
taagacctgg aggcagggta cttcttactg cttcaggcct gaatttaggt ggtcatttgg
                                                                   1200
ggtgtgcagg acagagcacc tcctaaggac ctgagagtcc agtcagtggg gaggcccagc
                                                                   1260
teccecacca actgtgtgag gacagateae ceaetteete acttgggget etggttttet
                                                                   1320
cttcttacta cccgattcca atgcctattg tgtcttttaa atcctctgtt ttaaaaatga
                                                                   1380
atcttaagct ctctcggagg gtccaccagg ccgtgcacct ctattcccag tgacaaatga
                                                                   1440
cacccettee aggetagtet caggatecag taggatteee tittgetgate tgtgeetitg
                                                                   1500
acctetgete tgecaettet gttttacetg caaggggeat gacatacagg gtagtaatta
                                                                   1560
tgaagttete ccaggeagtt ccaccaaagt cccacattgt acaagggaag gcatacacag
                                                                   1620
ttttaactac ctagccaggg gcagctggcc tttccccagg ccctttaaaa cacctgtttg
                                                                   1680
accageetgt gggteettte ceateggggt tecagettga gteetgetgg tageeettgg
                                                                   1740
cacaaggeet ggtaggeage etggtgetge catgtaceaa actetgetgg ggaaacetea
                                                                   1800
gccacagcag atgcaaaccc attaggtata gcatggttca agatattttt gcttgtttca
                                                                   1860
ataacacttt tgttcttgat tttaagggct attttagaaa ctgctttaaa atatttttga
                                                                   1920
aagtataaag aggtgaataa aacatactcc tgttccactg tgcaaagata gtcactgtta
                                                                   1980
atgtttcttt ccagtcgttt tctatgcata gtttagccat gacttctcat ggggacaaac
                                                                   2040
ccactggttt aattcaaccc ccaatgtcag gtttttatag gtcagcccag agttctcaag
                                                                   2100
cccagtcaca aagcagagec aggactcaaa ttcacaccct gtgactgage tgtttccact
                                                                   2160
gtaccatgga gacactaccc acaaatcgct ccttctccag tatctatgac acgaccataa
                                                                   2220
2280
ccaaatacaa aaagtttgga tgttttactt tagcagtggt gtggagactc tggtgtgctc
                                                                   2340
ttgtatagaa gcgt
                                                                   2354
```

```
<210> 3491
<211> 1030
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(798)
<223> similar to gi5912208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3491
aatctgctga aaacgcacaa gtttattgtt gggacaagat gaagattccc ttcatagtgt 60
tccagttgca caaatgggta actatcagga atatctgaag acattggctt ctccactgcg 120
agagattgat ccagaccaac ccaaaagact gcatactttt ggcaatccgt ttaaacaaga 180
```

```
taagaaggga atgatgattg atgaagcaga tgagtttgta gcagggccac aaaacaaagt
                                                                      240
gaaacgteca ggggaaceca acagtectat gteatetaag agaaggegga gtatgteeet
                                                                      300
gctgttgagg aaaccacaaa caccacctac tgtaactaac catgtgggcg gaaagggacc
                                                                      360
acceteagee tegtggttee catettatee aaaceteata aaaceeacee ttgtacatae
                                                                      420
agatgetaet ateatteaeg atggeeatga ggagaagatg gaaaatggte agateaeaee
                                                                      480
tgatggette etgteaaaat etgeteeate agagettata aatatgaeag gagatettat
                                                                      540
gccacccaac caagtggatt ctctgtctga cgacttcaca agtctcagca aagatgggct
                                                                      600
gattcaaaaa cctggtagta acgcatttgt aggaggagcc aaaaactgca gtctctccgt
                                                                      660
agatgaccaa aaagacccag tagcatctac tttgggagct atgccaaata cattacaaat
                                                                      720
cactcctgct atggcacaag gaatcaatgc tgatataaaa catcaattaa tgaaggaagt
                                                                      780
tcgaaagttt ggtcgaagta agtagggaaa gaacatctat caataatgca ccaggagggt
                                                                      840
cctctcattc tgtgattcac tatagattca agctatccct tgaggtacac tgggggcaat
                                                                      900
attgggcttt cacataattt aaggcagttc ctcttgtttt aactaaaaag gtacagccta
                                                                      960
tattttcctg ttttttcccc ttatttcttg gaatgtttcc ttttgctgcc gcaacaagtt
                                                                     1020
atcaaaagat
                                                                     1030
```

```
<210> 3492
<211> 8053
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3586)
<223> similar to gil665825 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3492
gctttccttt ctaaagtaga agaggatgat tatccctctg aagaactact agaggatgaa
                                                                       60
aacgctataa atgcaaaacg gtctaaagaa aaaaaccctg ggaatcaggg caggcagttt
                                                                      120
gatgttaatc tgcaagtccc tgacagagca gttttaggga ccattcatcc agatccagaa
                                                                      180
attgaagaaa gcaagcaaga aactagtatg attttggata gtgaaaaaac aagtgagact
                                                                      240
gctgccaaag gggtcaacac aggaggcagg gaaccaaata caatggtgga aaaagaacgc
                                                                      300
cctctggcag ataagaaagc acagagacca tttgaacgaa gtgacttttc tgacagcata
                                                                      360
aaaattcaga ctccagaatt aggtgaagtg tttcagaata aagattctga ttatctgaag
                                                                      420
aacgacaacc ctgaggaaca tctgaagacc tcagggcttg caggggagcc tgagggagaa
                                                                      480
ctctcaaaag aggaccatga gaacacagag aagtacatgg gcacagaaag ccaggggtct
                                                                      540
getgetgeag aacetgaaga tgactegtte caetggaete cacatacaag tgtagageca
                                                                      600
gggcatagtg acaagaggga ggacttactt atcataagca gcttctttaa aqaacaacaq
                                                                      660
tetttgcage ggttccagaa gtactttaat gtccatgage tggaageett gctacaagaa
                                                                      720
atgicatcaa aacigaagic agcgcagcag gagagccigc cciataatai ggaaaaaqic
                                                                      780
ctagataagg tetteegtge ttetgagtea caaattetga geatageaga aaaaatgett
                                                                      840
gatactcgtg tggctgaaaa tagagatctg ggaatgaacg aaaataacat atttgaagag
                                                                      900
gctgcagtgc ttgatgacat tcaagacctc atctattttg tcaggtacaa gcactccaca
                                                                      960
gcagaggaga cagccacact ggtgatggca ccacctctag aggaaggctt gggtggagca
                                                                     1020
atggaagaga tgcaaccact gcatgaagat aatttctcac gagagaagac agcagaactt
                                                                     1080
aatgtgcagg ttcctgaaga acccacccac ttggaccaac gtgtgattgg ggacactcat
                                                                     1140
gcctcagaag tgtcacagaa gccaaatact gagaaagacc tggacccagg gccagttaca
                                                                     1200
acagaagaca ctcctatgga tgctattgat gcaaacaagc aaccagagac agccgccgaa
                                                                     1260
gagccggcaa gtgtcacacc tttggaaaac gcaatccttc taatatattc attcatgttt
                                                                     1320
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Ctaaaactaa aatcataaaa ggctgatact tttgtttgct gctaggctat attcttccat
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```

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<210> 3493
<211> 4779
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)...(3458)
<223> similar to gi3776088 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 3493 aggagcagtc cgaggggaac gtgggttgaa cgttgcaact agggtggaga tcaagctgga 60 acaggagttc cgatcgaccc ggtaccaaga aggggagtgc ccgcggcagg gttcattgaa 120 aaaateetta gtgatattga catgteteaa gtgacataaa ttageeaatg acteggaatg 180 atggattete egaagattgg aaatggtttg ceagtgattg gaccagggae tgatataggg 240 atatetteae tecacatggt ggggtatttg ggaaaaaatt ttgatteage taaagtteea 300 tcagatgagt attgccctgc ttgtaaagag aagggaaagt taaaagcctt aaagacttac 360 cgaattagtt ttcaagaatc tatcttttg tgtgaggatc tgcagtgcat ctatcctttg 420 ggctctaaat cacttaataa cctaatttct cctgatttgg aagaatgtca cactccacat 480 aagcctcaga aaaggaagag cttagaaagc agctataagg attcacttct tttagcaaat 540 tccaaaaaga ctagaaatta tattgctatt gacggtggaa aagttttgaa cagcaaacat 600 aatggagaag tatatgacga aacctcgtca aacttacctg atagtagtgg tcaacagaat 660 ccaattagga cagctgattc cttggagegg aatgagattt tggaagetga tactgttgae 720 atggctacta caaaagatcc tgctacagtt gatgtctctg gaactggcag accttcccct 780 caaaatgaag gatgtacatc taaactggaa atgccactgg agagcaaatg tacatcattt 840 ecccaggett tatgtgteea gtggaaaaat gettatgete tetgttggtt agaetgtate 900 ctgtcagctt tggtgcactc ggaagagtta aagaacaccg tgactggact gtgctcgaag 960 gaggaatcta tattctggcg gttgcttaca aaatataatc aagcaaatac acttctatat 1020 accagtcaat tgagtggtgt taaagatgga gattgtaaaa aacttacctc agaaatattt 1080 gcagagatag agacctgtct gaatgaagtt agagatgaaa tttttattag ccttcagccc 1140 cagcttagat gcacattagg tgatatggaa agccctgtgt ttgcatttcc cctgctctta 1200 aaactagaaa cccacattga aaagctcttc ctatattctt tttcttggga ctttgaatgt 1260 tcgcagtgtg gacaccaata tcaaaacagg catatgaaga gtctggtcac ctttacaaat 1320 gtcatccctg agtggcaccc acttaatgct gcccattttg gcccatgtaa caattgcaac 1380 agtaaatcac aaataagaaa aatggtatta gaaaaagtat ctcccatatt catgttgcac 1440 tttgtagaag gettaceaea gaatgaettg eageactatg cattteattt tgaaqqetqt 1500 ctttatcaga taacttctgt aattcagtat cgagcaaata atcattttat aacatggatt 1560 ttagatgetg atggaagttg getggaatgt gatgaettaa aaggeeeatg ttetgaaagg 1620 cacaagaaat ttgaagttcc tgcttcagag atacatattg ttatttggga aagaaaaata 1680 teccaagtga cagataaaga agetgeetge ettecaetta aaaagaetaa tgaccaacae **1740** gctctcagta atgagaaacc agtatcttta acatcgtgtt ctgtgggtga tgctgcctca 1800 gctgaaacag cctcagtaac tcaccctaaa gatatatcag ttgcccctcg tactctttca 1860 caggacacag ctgtaactca tggagatcat ttactttcag gtccaaaagg tttggttgac 1920 aatattttac ctctgacact tgaagaaact atccagaaaa cagcctcagt ttcacagtta 1980 aattotgaag otttootgtt tagaaaataa acctgtagca gaaaatacag gaattotcaa 2040 aaccaatact ttgctatcac aagaatcact aatggcttct tcagtatcag ctccatgtaa 2100 tgaaaagctt attcaagacc aatttgtgga cataagtttt ccatcccaag ttgtaaatac 2160 aaacatgcag tcagtacagc tgaatacaga agatactgta aatactaaat ctgtgaataa 2220 tactgatgct actggtctta tacagggagt gaagtcagta gaaattgaga aggacgctca 2280

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<210> 3494
<211> 1528
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(226)
<223> similar to gi836883 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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caccetggat ggeggagage teatagteaa etacagagea caageeagte aggeeacace
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gtatgaccac accacctggt tcaagttttc tgtggcttaa ggaagtgtga agatatgatc
                                                                      720
cagtccaggg ctaggctcag ccacctgtct cctgtccaga aaaaaggtga agattaagaa
                                                                      780
gctttcagaa tgattctatg gattaaaatc atacaaatgg tggctgttct gagaatcagt
                                                                      840
ctgggtattg atttcctttt ccagtgactg gctccaggcc atgtctaatg accagctcga
                                                                      900
ttccctgtgc agttcagaga gcaagtgaac ccaaccaaca atgtcgtcat ctaagccctg
                                                                      960
accetageca gggaetecea tgetgetgtt ggetecatet etecaeaetg cetettett
                                                                     1020
ttcaactttt tgcccttcct ttctttaaag ctattctcac attgctttta tttcctcctc
                                                                     1080
cttcacctcc aaccactgtc agcagcactc tggagttttc aaatgtcaca ttagcctcac
                                                                     1140
cctgcatgct aggagatgga cctgtctcta tacagcagta gatgattgat aagtgaggaa
                                                                     1200
actgaggett acagaggttg aagaccaaca agetaataaa taaaaagttg aggeegggea
                                                                     1260
eggtggetea egeetgtaat eeeageaett tggaaggeeg aggeaggegg ateaegaggt
                                                                     1320
caggagatcg agaccatcct ggctaacacg gtgaaacccc gtctctacat aaaaaattag
                                                                     1380
ctgggtgtgg tagcacgcac ctgtagtccc agctacttgg gaggctgaag caggagaatc
                                                                     1440
gcttgaacct gggaggtgga ggttgcagtg agccgagatc atgccactgc actgggcaac
                                                                     1500
agagcaaaac tcgatctcaa aaaaaaaa
                                                                     1528
```

```
<210> 3495
<211> 1404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(959)
<223> similar to gi5926736 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
atcattecte tggccacgtg ggactttgaa gacagcacaa cacagteett cegetggcat
                                                                      420
ccgctccggg ccaaggcgga taaatacgaa gacagcgttc ctcagagtaa tggagagctc
                                                                      480
acagteeggg ctaagetggt tetecettea eggeecagaa aacteeaaga ggeteaagaa
                                                                      540
gggacagate agecateact teatggteaa etttgtttgg tagtgetagg agecaagaat
                                                                      600
ttacctgtgc ggccagatgg caccttgaac tcatttgtta agggctgtct cactctgcca
                                                                      660
gaccaacaaa aactgagact gaagtcgcca gtcctgagga agcaggcttg ccccagtgg
                                                                      720
aaacactcat ttgtcttcag tggcgtaacc ccagctcagc tgaggcagtc gagcttggag
                                                                      780
ttaactgtct gggatcaggc cctctttgga atgaacgacc gcttgcttgg aggaacccag
                                                                      840
acttggttca aagggagaca cagetgttgg cggggatgca tgctcacaat cgaagctcca
                                                                      900
gtggcagaaa gtcctttcca gccccaatct atggacagac atgactcttg tcctgcactg
                                                                      960
acatgaagge ctcaaggttc caggttgcag caggegtgag gcactgtgeg tetgcagagg
                                                                     1020
ggctacgaac caggtgcagg gtcccagctg gagacccctt tgaccttgag cagtctccat
                                                                     1080
ctgcggccct gtcccatggc ttaaccgcct attggtatct gtgtatattt acgttaaaca
                                                                     1140
caattatgtt acctaageet etggtgggtt ateteetett tgagatgtag aaaatggeea
                                                                     1200
gattttaata aacgttgtta cccatgtcct ccagtgctta tcaaatgagg taaaaggccg
                                                                     1260
gctggtgggc atggtgactc ccccctgtga tcccagcaac tttgggaggc tgcagtggat
                                                                     1320
ggettgaget cagaagtgtg agateageee aggeaacata gataccetgt ctacaaaaaa
                                                                     1380
accaaaaaat tatccagggg tggg
                                                                     1404
```

```
<210> 3496
<211> 1816
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1698)...(0)
<223> similar to gi1552275 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3496
ttttttttt ttcaaacgca tgatgagctt tgttttgtga gtaaaacata atacgcaaaa
                                                                      60
gaagtatget tgtagggggg tettgggteg teatttettt tetgtttetg gtttgtttt
                                                                      120
ggagagagte tggetttgte geceaggetg gagtgeagtg gegegateae ggatggetge
                                                                      180
ageteetggg gettegette etgatteggt tgteetattt teagtteact eeteaggege
                                                                      240
ggaggaaatg gtggaaggec cagetetggg tgateetggg egetgeecec gttaceegtt
                                                                      300
accaggaaga atggtgagee tggcaggtca cagcacgage gtgcacagge ccagcaggge
                                                                      360
catcagcage agegggaget ggggcaeggg egtggtgeca gaggcataca gaeaggtggt
                                                                      420
gtaagegtea atgtecaeet ggegeatgge acaeaegtge tgeatgetge aggeetegte
                                                                      480
geagaececa geagagtage tgactgagtt atagaegtag tagegetgea gtgtgetetg
                                                                      540
gtegecageg atgeggteea geactgtgtg catggagtgg gegetggegt eeggeaceee
                                                                      600
ataggecteg gteagetggt actegagete ceagegege gteecetgag cattegeetg
                                                                      660
getcaggite atgaagtagg teaceatgte etteaggete agtgtggete ggteatatte
                                                                      720
gaacacccgg atggctggat tgttggcccc attgaccact ccaggtaatg tggttttcca
                                                                      780
tggggtgact ccaggtgtga tgaacatggc gcttatgggg acacctgcat catcatagag
                                                                      840
catecgaaag etgteggtgt ggtggtgeec gaagaactge eetgetatga egegatgatg
                                                                      900
cttccggacc accttcaggt atttttcatt gaagccctcc cggaaccatg ccttgttttg.
                                                                      960
cgtcttctca aagaaccccg ggggcacgtg gccgacaatg tacaccatgt ccccagcttt 1020
ggatgcatcg gtcagcacat cttccagcca ctggaactgc tggccagggt ccgccatgtc
                                                                     1080
tgctgtcagc gcattgctgg tatagtacag attggtgttg aggaccacaa ttcgcccagc
                                                                     1140
```

```
CCCgctggga cccggcagct tctcacagta gaaggcacct tttttgaaga qaqcqatqqa
                                                                     1200
ctcattacta agccagggtt tccatagttc tgctatctga ttgtagatgt tgttacttcc
                                                                     1260
agetgggaac tggtttttgg ggtgaaaate atgatttece aaageageat agaetttagt
                                                                     1320
atctggaaag acctctctga tgagcttggt caggcgttcc acaatttcca gtacagctgc
                                                                     1380
ctctcccagt ttctcatcgg gcacatgagg cgtgtcatca ccagtccaga gaatgaagtc
                                                                     1440
tggctctggc tcaatctcct tcatggcata gatggaggag ttgatgaggg cccagggaga
                                                                     1500
atcacagagg tagtcacccc aggggcctgc gtcgggcact ggctgggatc cagctgatgg
                                                                     1560
gcacacctgg aaggggtctt tggatacctt gtagtcaggg tcaaggtgca ggtcagcgat
                                                                     1620
gtgccagaac ttccctggtt cagccctggc acctccccag ttagccagga aaatcagcca
                                                                     1680
ggcgagcage eteatecteg gggeteactt ecceagagee gtgggattet ceaqqeactq
                                                                     1740
ttgttgttct caccacaggc ttcctaagta gttttctgtg gccacgtgcc ggagcaggac
                                                                     1800
tccttgtcct gttacg
                                                                     1816
```

```
<210> 3497
<211> 466
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (343)...(146)
<223> similar to gi4519602 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3497
tttgagcctt tgtagatcac tagtccatgc ggtggaattc ggaggggcgg ccctgcggtt
                                                                       60
getetgtaca agteegggtt ggtgaeggee eeageagtee eeacagggee eetgggggge
                                                                      120
gcaggaagtg ggcaggcgcc tctagatgaa atattccctc ttgtcgtccc ctcctgactg
                                                                      180
eccgeettet geattgatga tggeegtgte egegtetgga geategtegg ageettttge
                                                                      240
ctcatgtgtc agtggccgag gaagatgagc atgatgagca gcaggaagac aatgaaagcc
                                                                      300
acgateceae egatgatgge gtgtecegee caettaagga tatteetgga agaagatgea
                                                                      360
gtageteett etaecaecag gegteageae tggaaacaga egeagteeaa caggaeteee
                                                                      420
tetgeetgge tgttgageae aaageagagg ggagateage aagata
                                                                      466
```

```
<210> 3498
<211> 3344
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3345)...(677)
<223> similar to gi5689457 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

3240

3300 3344

<210> 3499
<211> 2891
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2138)
<223> similar to gi4426597 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 3499

atggcggage gagaaagegg eggeetggga gggggggeeg egteeeegee egeegeetee 60 ccgttcctgg ggctgcacat cgcttcgcct cccaatttca ggctcaccca tgacatcagc 120 ctggaggagt ttgaggatga agacctctcg gagatcactg atgagtgtgg catcagctta 180 cagtgcaaag acaccctgtc cttacggccc ccgcgcgccg ggctgctctc tgcgggcggc 240 300 ggggacactc ccggggccga ggacgacgag gaggacgacg acgaggagcg cgcggcccgg 360 cggccgggag cggggccgcc caaggccgag tccggccagg agccggcgtc ccgcggccag 420 ggccagagcc aaggccagag ccagggcccg ggcagcgggg acacgtaccg gcccaagcgg 480 cccaccacge teaacetett teegeaggtg cegeggtete aggacacact gaataataat 540 tetetgggea aaaageacag ttggeaggat egggtgtete gateateete acceetgaag 600 acaggggage agacaccacc gcatgaacac atctgcctga gcgatgaget gccccccag 660 ageggeeeeg ceeccaceae agategagge acetecaceg acagecettg cegeegeage 720 acagccaccc agatggcacc teegggtggt eccegtggtg eccegcactg ggggtegggg 780 ccactcgcat cgagaccgaa tccactacca gtccgatgtg cgaatagagg ccactgagga 840 gatctacctg accccagtgc agaggccccc ataatattgc agagcccacc tccgccttca 900 taccgccccc agagagccgg atgtcagtca gatttattgc agaccctgcc gcctacccct 960 ccacggcagg gcggccgcac ccctccatca gtgaagagga agagggcttc gactgcctgt 1020 cgtccccaga gcgggctgag cccccaggcg gagggtggcg ggggagcttg ggggagccgc 1080 cgccacctcc acgggcctct ctgagctcgg acaccagcgc cctgtcctat gactctgtca 1140 agtacacget ggtggtagat gagcatgcac agctggaget ggtgageetg eggeegtget 1200 toggagacta cagtgacgag agtgactotg coaccgtota tgacaactgt gootcogtot 1260 cctcgcccta tgagtcggcc atcggagagg aatatgagga ggccccgcgg ccccagcccc. 1320 ctgectgeet eteegaggae teeaegeetg atgaaceega egteeattte teeaagaaat 1380 teetgaaegt etteatgagt ggeegeteee geteeteeag tgetgagtee ttegggetgt 1440 tctcctgcat catcaacggg gaggagcagg agcagaccca ccgggccata ttcaggtttg 1500 tgeetegaca egaagaegaa ettgagetgg aagtggatga eeetetgeta gtggagetee 1560 aggetgaaga etaetggtae gaggeetaea acatgegeae tggtgeeegg ggtgtettte 1620 ctgcctatta cgccatcgag gtcaccaagg agcccgagca catggcagcc ctggccaaaa 1680 acagtgactg ggtggaccag ttccgggtga agttcctggg ctcagtccag gttccctatc 1740 acaagggcaa tgacgtcctc tgtgctgcta tgcaaaagat tgccaccacc cgccggctca 1800 ccgtgcactt taacccgccc tccagctgtg tcctggagat cagcgtgcgg ggtgtgaaga 1860 taggcgtcaa ggccgatgac tcccaggagg ccaaggggaa taaatgtagc cacttttcc 1920 agttaaaaaa catctctttc tgcggatatc atccaaagaa caacaagtac tttgggttca 1980 tcaccaagca ccccgccgac caccggtttg cctgccacgt ctttgtgtct gaagactcca 2040 ccaaagccct ggcagagtcc gtggggagag cattccagca gttctacaag cagtttgtgg 2100

```
agtacacctg ccccacagaa gatatctacc tggagtagct gtgcagcccc gccctctgcg
                                                                     2160
tcccccagcc ctcaggccag tgccaggaca gctggctgct gacaggatgt ggcactgctt
                                                                     2220
gaggagggc acctgccacc gccagaggac aaggaagtgg gggccgctgg cccagggtag
                                                                     2280
gggagggtgg ggcaatgggg agaggcaaat gcagtttatt gtaatatatg ggattagatt
                                                                     2340
catctatgga gggcagagtg ggctgcctgg ggattgggag ggacagggct tggggagcag
                                                                     2400
gtctctggca gagaaggatg tccgttccag gagcacacgg ccctgcccca tcctgggcct
                                                                     2460
tacctcccct gccagggctc gggcgctgtg gctcctgcct tgatgaagcc cgtgtcctgc
                                                                     2520
cttgatgaag cctgtgccac ctgcaagtgc ccgccctgcc cctgccccaa cccccaccga
                                                                     2580
agagecetga geteaggetg ageceageea ceteceaagg aettteeagt gaggaaatgg
                                                                     2640
caacacgtgg aggtgaagtc cctgttctca gctccgtcat ctgcggggct tctgggtggc
                                                                     2700
tectgecact gaceteaceg geatgetgge etgtggeagg cetaggacet caggegggga
                                                                     2760
ggaggagctg ccgcaaggcc ctgtcccagc agaagaggga ggcttcctga ctgacacagg
                                                                     2820
ccagececat ettggteetg teaccetgge eccaactatt aaagtgeeat tteetgtetg
                                                                     2880
gaaaaaaaa a
                                                                     2891
```

```
<210> 3500
<211> 1062
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(892)
<223> similar to gi4102715 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3500
gggttaggag aaagagacag gtgtatggca ccgacagcag gttcagcatc ttggacaaaa
                                                                       60
ggttcttaac caatttccct ttcagcacag ctgtgaagct ttccacgggc tgtagtggca
                                                                      120
ttctcatttc ccctcagcat gttctaactg ctgcccactg tgttcatgat ggaaaggact
                                                                      180
atgtcaaagg gagtaaaaag ctaagggtag ggttgttgaa gatgaggaat aaaagtggag
                                                                      240
gcaagaaacg tcgaggttct aagaggagca ggagagaagc tagtggtggt gaccaaagag
                                                                      300
agggtaccag agagcatctg caggagagag cgaagggtgg gagaagaaga aaaaaatctg
                                                                      360
gccggggtca gaggattgcc cgaagggagg ccttcctttc agtggacccg ggtcaagaat
                                                                      420
acceaeatte egaagggetg ggeaegagga ggeatggggg aegetaeett ggaetatgae
                                                                      480
tatgctcttc tggagctgaa gcgtgctcac aaaaagaaat acatggaact tggaatcagc
                                                                      540
ccaacgatca agaaaatgcc tggtggaatg atccacttct caggatttga taacgatagg
                                                                      600
gctgatcagt tggtctatcg gttttgcagt gtgtccgacg aatccaatga tctcctttac
                                                                      660
caatactgcg atgctgagtc gggctccacc ggttcggggg tctatctgcg tctgaaagat
                                                                      720
ccagacaaaa agaattggaa gcgcaaaatc attgcggtct actcagggca ccagtgggtg
                                                                      780
gatgtccacg gggttcagaa ggactacaac gttgctgttc gcatcactcc cctaaaatac
                                                                      840
gcccagattt gcctctggat tcacgggaac gatgccaatt gtgcttacgg ctaacagaga
                                                                      900
cctgaaacag ggcggtgtat catctaaatc acagagaaaa ccagctcttc ttaccgtagt
                                                                      960
gagatcactt cataggttat gcctggactt gaactctgtc aatagcattt caacattttt
                                                                     1020
caaaatcagg agattttcgt ccatttaaaa aatgtatagg tg
                                                                     1062
```

```
<210> 3501
<211> 1873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1789)...(395)
<223> similar to gi2662167 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3501
ttttttttt ttcaccagtt ttagcatgca actttattaa caacatgtaa ataaaatctc
                                                                       60
aaaagaatac acatatcaat ataaagcaca gaagtatagc ttactcagga tgaatagatt
                                                                      120
cattatcagg tcacgttgca aaaataccta aaatatctca atttatatac tatatagcac
                                                                      180
aataaaaatc agcacatgtt caggatctca agattaattg gtatccataa aatggcctcc
                                                                      240
ctcaatcaac atgggaaacc taaggattgg atttattaat taccaatatg cattggggtt
                                                                      300
ccatattgca actccccaaa actgtttgag gctttatgag aacagagggg tattcagagt
                                                                      360
tttagtaata aaccggagga cttaatctct cacttcggga tcactgtgct ctgctaagtc
                                                                      420
ttggagtttc tgaccaaact gttttgcttc ctggaatatt gaaataagct cagatttagt
                                                                      480
gaacttttcc ttggtaaata gctttgcctt tgttttgaac tgaaaattta tattctcaaa
                                                                      540
tatttcaata atattaagaa tattggcctt tgactcattc ttgttaaagg gtgcaaccaa
                                                                      600
tgatgacagt actttggcac tgatcaattc tcttgtattg gcgtgatttt tagacaaaca
                                                                      66.0
cgaaaacact tttaaaaacat aaaacttggt tttgacactt cccttgttta acaaggtgag
                                                                      720
gaaatetgga atataaetgg taateaeata gtgatettea aattttatae teaagtgeee
                                                                      780
tagtaatttc agtccagcca gctgcacagg ggagttcaag gggcaagaga ttatgccttt
                                                                      840
acaaacttga tgtatatatg actcccctga ttttggttct tcggaagact cagagctgtc
                                                                      900
atccaccata cttaaagctc cagggtgttc tttaacattg ggattattga ccaagttttc
                                                                      960
aatcataaca gtaataccta catcatgaat tatatcttga gtaaatggat aagcaggact
                                                                     1020
gatgcccatt atcattgtag ctatttcatg aatgaaagga tccttagtta acttaaggag
                                                                     1080
ggcaacaagt ttatcaaact ctttaggctc taaactaaag ccacgtgatt tgcagtggca
                                                                     1140
ggccttcgga ttaggcccat acttttccct ttgcctaatc tgttttttga tctcagctaa
                                                                     1200
ggtctggtaa taaggcccat gataaggtgg gatcttggtc aaaggtcgaa tccccagagg
                                                                     1260
agtttcaatc aaggtctcaa ccagggtcca gtttccttct ggaggcaagg attgctcccc
                                                                     1320
teetteaact ggaactagga caatatacet ggeeettgae catgetatta cettttgttt
                                                                     1380
tatagtaagt gtgggtttgt gtgtgggctt gggcttttcc tggatcttag gtaggggctt
                                                                     1440
ataaacttga agagaggtet ettetteagg ceagaaceag gaecetaeac taggetette
                                                                     1500
tccagtccag aaccaggagc atatattttc ttcatcctca tcactggatt tcatcccaat
getggtetet teeettetgt caggtetgga cecagtattg geettateat gtgaettgge
                                                                     1620
ataggaccta atatttgcct caatgacagc aacaaccttg acttcagact tggttacagt
                                                                     1680
actgacccta gacataggca tggcctttga cttggtttgt ggcactatac tgcgttctgc
                                                                     1740
caggggtttt gtettagtet caaccatgae tetagtetta gttgtatett ecaecttgat
                                                                     1800
cactteeett gteacageea tageeteeet gtaggteact gtatgtgtee tggteattge
                                                                     1860
tccatcacca gct
                                                                     1873
```

```
<210> 3502
<211> 2515
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (31)...(1190)
<223> similar to gi3170538 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 3502 ttttgaccgc gctggaggaa ctctgcacga gatgaaatcc tgctttcttt tcctcagaac 60 tactatattc agtggctaaa tggctccctg attcatggtt tgtggaatct tgcttccctt 120 ttttccaacc tttgtttatt tgtattgatg ccctttgcct ttttctttct ggaatcaqaa 180 ggetttgetg geetgaaaaa gggaateega geeegeattt tagagaettt qqqeatqett 240 cttcttcttg cgttactcat tcttgggata gtgtgggtag cttcagcact cattgacaac 300 gatgccgcaa gcatggaatc tttatatgat ctctgggagt tctatctacc ctatttatat 360 tectgtatat cattgatggg atgtttgtta ettetettgt gtacaccagt tggeetttte 420 tegtatgtte acagtgatgg gteagttget agtgaageea acaattettg aagaeetgga 480 tgaacaaatt tatatcatta cettagagga agaagcaete cagagaeega etaaatggge 540 tgtcttcatc cggtggaata caacataatg gagttggaac aagaacttga aaatgtaaag 600 actettaaga caaaattaga gaggegaaaa aaggetteag catgggaaag aaatttggtg 660 tatecegetg ttatggttet cettettatt gagacateca teteggteet ettggtgget 720 tgtaatattc tttgcctatt ggttgatgaa acagcaatgc caaaaggaac aagggggcct 780 ggaataggaa atgcctctct ttctacgttt ggttttgtgg gagctgcgct tgaaatcatt 840 ttgattttct atcttatggt gtcctctgtt gtcggcttct atagccttcg attttttgga 900 aactttactc ccaagaaaga tgacacaact atgacaaaga tcattggaaa ttgtgtgtcc 960 atcttggttt tgagctctgc tctgcctgtg atgtcgagaa cactgggaat cactagattt 1020 gatctacttg gcgactttgg aaggtttaat tggctgggaa atttctatat tgtattatcc 1080 tacaatttgc tttttgctat tgtgacaaca ttgtgtctgg tccgaaaatt cacctctgca 1140 gttcgagaag aacttttcaa ggccctaggg cttcataaac ttcacttacc aaatacttca agggattcag aaacagccaa gccttctgta aatgggcatc agaaagcact qtqaqacqca 1260 cagacggcgt cttctgccac caagagaccc gagaactcca gattcacgac attcctgtcc 1320 catgtagaag catttccatt caaccgtggc ccctcttcag aacctagacc tatcagtgcc 1380 attititt cataatctac gaagaacttg gctatggctg atcttttta aatttaactt 1440 tetgatggae cetgtagttt ceagetaagt geatatteet tacagacata tagaacageg 1500 cattettetg tagacatttg ctcatgttgg taaatacaat cacccatatg aaaaaattgt 1560 tttcacctga tatgaaaatg ttagaaaagg caaactccgg gacttctaaa gatttactta 1620 aatcccatta tgtactttat tcagaatgta gaagctgact tgaaaggcat ccttggtact 1680 aagtgaaget tatteagaaa atgeattttt caaatgeaat gggeaactge ttgtagatat 1740 catttttgca gtgtatgttg gagctgtaat ggttgcaatt atgtttctta tttccttaaa 1800 agcaaaaagc gtagtttctg atttatgtta tagaatgata ctgattagac tttgagccaa 1860 ggggaaaata ctaaattctt ttaaacctgg agccttagag agccacagga atatcttctg 1920 ttgtacagtc taataagctg tggtaggaag tatcatgtaa tcacagttta atgacagttt atgtatatat ataattcagt attccctctg ataacatagt tgccagtgtt taatacactt 2040 gtaacttgga tttttacctt ataggctata tgtatactca gttttttaaa gcatttttt 2100 cagagateae ttaatteece atgettetge aatgeatata aaaaetataa atgeegagtg 2160 gtagaaactc ctctttcttc atagtcctca ggctttggtt acatttgcat atgccatttg 2220 aageetecag ettttaecag tttaacatee aaagtteaca geateageat teatggtgta 2280 agaacagttt tgcagtataa cacgatctga taatcattca gttattaaat tgtaaataat 2340 tattgggatg gtttcttggc tttaagtcca ctgaataaaa actatgaaat tgcactctgt 2400 gtcaaccatc cactagggta ggataccgaa atctgtggca tgcaaaaata gggagatggg 2460 gcccatttgg cacacaattt cgtagttatg cagtctgcca ttttaatttg ttcac 2515

```
<210> 3503
<211> 1087
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1088)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1089) ... (518)
<223> similar to gi3212996 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3503
ttttttttt ttcactacaa agtcctttat taacaagtca ataaaaacag aagagagaga
                                                                       60
gatgtcaaaa tactttcctt ggaggcccca ggagggagag gcactgtcag gactcacctg
                                                                      120
gccagggaag gcaaccccac cagaggcaga acggaggtca ggggggcagc tggcccagga
                                                                      180
agcetttggg gaatggetea ggeeteagge agggaetgtg caaacgeega ggetgegeag
                                                                      240
ggagtgatgg gttgggggct taagccccga gcaccgtgtt cccctgcatg ggcagacacg
                                                                      300
cagtcaggct agcacctgcc cactccacct gtgagtgtac acaggtgtcc gcgtaaaagc
                                                                      360
cggtgcctgc acgcagctta catacagaga gcggaacgag ggtccccagc agaacagggg
                                                                      420
gctcgttcca gagcttaagg aaatagctta gagaagtctt tggaagcctg ggtcgagggg
                                                                      480
agagcaggga ggctgctctg ttgcccatgg gcctcaggaa gccaggcctt cctgccgccg
                                                                      540
ctggaggacc tcgatgacgc tgccgatacc gtcctcgggc accagggcgt ggtcgaagtt
                                                                      600
gaaggtgctg atgtagtagg cagagatgtc agcggcagcc aggggacctg caatctgtgc
                                                                      660
cacgatgeca catteateaa ageceagggg etgtecaceg atgegeacea tectecacag
                                                                      720
ctcccccgag gagctggtca gcaggaggtc actggggaac tttttctgtg tttcagcatc
                                                                      780
catgacaatg gaagatataa ccctcgatga gggagaaggc aaagaacgtg atggagctgg
                                                                      840
gttcaggact gctagaggct gcctccttgg gggtgctgtg cgagtagaag aggacatcta
                                                                      900
tgagggtggt ggcgatggct ggaagcgtct cagggtccag tgtgaggaca cagaagcggt
                                                                      960
tetgtggget etggatggga tgcacegtgg ggetgggeec atgetgagtg eggggaaage
                                                                     1020
cattgctgga atcatccctc gtcacaggca cnagctctcc gcccactcgc ggtaaatgtc
                                                                     1080
gaactcc
                                                                     1087
```

```
<210> 3504
<211> 654
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (652)...(242)
<223> similar to gil573605 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3504
ttttttttt ttggcttgag actgaacgtt tttccatcat tttacaaatc agggatactc
                                                                       60
gtcccaattg gcagggccca ccccaagact gccggcccct agagccctgg ccagggccca
                                                                      120
ggtctgggag ctgccactgg gaggcctgtt gtgagtggtg gtactggagc tcagggtgcc
                                                                      180
eccagtteet etteeggeee aggtggtett eaccaggeet acageagggg gttgagggea
                                                                      240
agcaccccct teetgaggat gaggttteeg tagagggeeg tetecccegt tgecacaaca
                                                                      300
gcaaaagcct tottagcccg ttcataaaac tcaaacctct ctatctttgc cagggctctc
                                                                      360
acacageegg ceetgegtag gatggacteg tacteegtee acactggggt etgeaggeee
                                                                      420
ctctccttgt cgctgggcac cagctccatg actgcagccg gactctccac ataggtgtcc
                                                                      480
aggggcagca gcttcagcac ggcctccagg agctgcggga tgccacaggc cgtctgcacc
                                                                      540
gatetecatg ggeccacaac tggcagatgg aggaggeceg ggaagtteaa gteegaaagg
                                                                      600
aacgateteg teecegtgee ceateegege ceagegegaa ageaatttgg gggg
                                                                      654
```

```
<210> 3505
<211> 2028
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2029)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (9) ... (1045)
<223> similar to gi2764994 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3505
ggcacgagat ttccttagga gcaatttgtg cagtgttgct ggttattatg gggctatttg
                                                                       60
caactaggtg taaccgcgag aagaaagaca ctagatccta taactgcagg gtggccgaat
                                                                      120
caacttacca gcaccaccca aaaaggccat cccggcagat tcacaaaggg gacatcacat
                                                                      180
tggtgcctac cataaatggc actctgccca tcagatctca tcacagatcg tctccatctt
                                                                      240
catctcctac cttagaaaga gggcagatgg gcagccggca gagtcacaac agtcaccagt
                                                                      300
cactcaacag tttggtgaca atctcatcaa accacgtgcc agagaatttc tcattagaac
                                                                      360
teacecaege caeteetget gttgageagg teteteaget tettteaatg etteaceagg
                                                                      420
ggcaatatca gccaagacca agttttcgag gaaacaaata ttccaggagc tacagatatg
                                                                      480
cccttcaaga catggacaaa tttagcttga aagacagtgg ccgtggtgac agtgaggcag
                                                                      540
gagacagtga ttatgatttg gggcgagatt ctccaataga taggctgctg ggtgaaggat
                                                                      600
tcagcgacct gtttctcaca gatggaagaa ttccagcagc tatgagactc tgcacggagg
                                                                      660
agtgcagggt cctgggacac tctgaccagt gctggatgcc accactgccc tcaccgtctt
                                                                      720
ctgattatag gagtaacatg ttcattccag gggaagaatt cccaacgcaa ccccagcagc
                                                                      780
agcatecaca teagagtett gaggatgaeg eteageetge agatteeggt gaaaagaaga
                                                                      840
agagtttttc cacctttgga aaggactccc caaacgatga ggacactggg ggataccagc
                                                                      900
acatcatete tgetetegga aatgageagt gtgtteeage gtetettace geetteeetg
                                                                      960
gacacctatt ctgaatgcag tgaggtggat cggtccaact ccctggagcg caggaaggga
                                                                     1020
cccttgccag ccaaaactgt gggttaccca cagggggtag cggcatgggc agccagtacg
                                                                     1080
cattttcaaa atcccaccac caactgtggg ccgccacttg gaactcactc cagtgtgcag
                                                                     1140
```

```
ccttcttcaa aatggctgcc aqccatggag gagatccctg aaaattatga ggaagatgat
                                                                     1200
tttgacaatg tgctcaacca cctcaatgat gggaaacacg aactcatgga tgccagtgaa
                                                                     1260
ctggtggcag agattaacaa actgcttcaa gatgtccgcc agagctagga gattttagcg
                                                                     1320
aagcattttt gtttccatgt atatggaaat agggaacaac aacaacaaca aaaaaccctg
                                                                     1380
aaagaactgg cattgccaaa tagttgcatt tatcataaat gtgtctgtgt atattgaata
                                                                     1440
ttaaatactg tattttcgta tgtacacaat gcaagtgtga ttattttaat ctgtatttta
                                                                     1500
aaaatacatt tgtaccttat atttatgtgt aatttaacaa acaaatttta tttttttact
                                                                     1560
cccatgacag acatgttttt cctagtcgtg tagaaactag ccactgttca aatctgatac
                                                                     1620
actattcaac cacaaagtgt aaaggcactg cttagattag ttttgttggg gaagaattat
                                                                     1680
tatgttgtat ggacaacccc actgaagcat ttatacaatt cttaattcca ttaagtgatc
                                                                     1740
ccactttttt tcaataactt tttagaaatt aaggaatcat taaaattgtt aaggctattt
                                                                     1800
tattgttatt ttctctactt tctactagcc ccaatagttg gaactcttat aggggaaaat
                                                                     1860
cggaaagata aagtggaaag gtttatttca ggactgagga aatatcttga aggttattta
                                                                     1920
ttaggatgga ctatctccaa atggaacttt tttattagga cantqatgga aaacaggaac
                                                                     1980
caaaagtcca atgtttncct gactcccagg gcccctacta tttccagg
                                                                     2028
```

```
<210> 3506
<211> 1151
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (824)...(170)
<223> similar to gi3878737 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3506
ttttttttt ttgaagatcg cacactttat tttgaaaacc aggccaggga cagctccagt
                                                                       60
ttggggggag gggaagagat tataactttt aaatctacta cgaaaataca aaaagaggaa
                                                                      120
tgtgacaggg ttccttcctg tgttatgtca ccgtctgtaa tcagatccca cagtccagcc
                                                                      180
cagaatcata attcacataa cagcgaaact catttgccaa gttccgggtg tgtcttggga
                                                                      240
acaaacgtgc acatcttcac tccaaggagt tctgctgcct gttcttccat gatggcacct
                                                                      300
gtgccacage agaatettge ecegegteag gtacttgaeg gttteegatg tttttetgag
                                                                      360
acattectee gaaagatagg gaggatetge tattacgatg teaaaactat gtgcagcaat
                                                                      420
tetttegggt aagteeaatg gattattgta atcatagaaa ataaacteet etecatacat
                                                                      480
ggcaaatctt ttgtcatatt caaagatgta tatcgaaaag ttttctctgc acagctctct
                                                                      540
gagtttctgg taaacactag gggcactcac acatgcgatt ctgccacctt ctcctacagc
                                                                      600
tgcaattgcc tcctgtgcca gctgcagagc agtttcctga ctataccaaa actggctcag
                                                                      660
ttgccaattc tcttctatta ttccaatgtt atatttatca tcctcgcctg gctcaatttg
                                                                      720
ttgcttttgc tcagcataaa attcctggag agctgctaag gcatgggcag aaagctgggg
                                                                      780
tgtctcatca tcttccaaat cactcatttc acaagttgtt tataacccag gtgtggtggc
                                                                      840
aggcacctat agcgccagct actcaggagg ctgagacagg agaatcgctt gaacccagga
                                                                      900
gatggaggtt gcagtcagct gagatctcgc cattgcactc cagcctgaat gacaggagtg
                                                                      960
agacageege gegtgegeae ecaegegtee geggaegegt gggetggeet eegttgeaae
                                                                     1020
tgttttgacc tagtgaaggc ctagactttc tcagacagat ttcttttaac tcttctqccc
                                                                     1080
tgactccagt cttcactggg atgctgcctt gcacttgagg aatgtgaacc ttccctaagc
                                                                     1140
ggacgcgtgg g
                                                                     1151
```

```
<210> 3507
<211> 2249
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1319)
<223> similar to gi5262640 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cccagcgccc cggaagtgat ctgtggcggc tgctgcagag ccgccaggag gagggtggat
                                                                       60
ctccccagag caaagcgtcg gagtcctcct cctccttctc ctcctcctcc tcctcct
                                                                      120
ccagccgccc aggetccccc gccacccgtc agactcctcc ttcgaccgct cccggcgcgg
                                                                      180
ggccttccag gcgacaagga ccgagtaccc tccggccgga gccacgcagc cgcggcttcc
                                                                      240
ggagccctcg gggcggcgga ctggctcgcg gtgcaggtaa agctccagat ggctctggaa
                                                                      300
cttatgagga aagagttgga ggacgccttg actcaggagg ccaacgtggg gaaaaagact
                                                                      360
gtcatttgga aggagaaagt ggaaatgcag aggcagcgct tcagattgga gtttgagaag
                                                                      420
catcgtggct ttctggccca ggaggagcaa cggcagctga ggcggctgga ggcggaggag
                                                                      480
cgagcgacgc tgcagagact gcgggagagc aagagccggc tggtccagca gagcaaggcc
                                                                      540
ctgaaggage tggcggatga gctgcaggag aggtgccage gcccggccct gggtctgctg
                                                                      600
gagggtgtga gaggagtcct gagcagaagt aaggctgtca caaggctgga agcagagaac
                                                                      660
atccccatgg aactgaagac agcatgctgc atccctggga ggagggagct cttaaggaag
                                                                      720
ttccaagtgg atgtaaaget ggateeegee aeggegeaee egagtetget ettgacegee
                                                                      780
gacctgcgca gtgtgcagga tggagaacca tggagggatg tccccaacaa ccctgagcga
                                                                      840
tttgacacat ggccctgcat cctgggtttg cagagettet catcagggag gcattactgg
                                                                      900
gaggttetgg tgggagaagg agcagagtgg ggtttagggg tetgteaaga cacaetgeca
                                                                      960
agaaaggggg aaaccacgcc atctcctgag aatggggtct gggccctgtg gctgctgaaa
                                                                     1020
gggaatgagt acatggtoot tgootoocca toagtgooto ttotocaact ggaaagtoot
                                                                     1080
cgctgcattg ggattttctt ggactatgaa gccggtgaaa tttcattcta caatgtcaca
                                                                     1140
gatggatett atatetaeac atteaaccaa etettetetg gtettetteg geettaettt
                                                                     1200
ttcatctgtg atgcaactcc tcttatcttg ccacccacga caatagcagg gtcaggaaat
                                                                     1260
tggggcatcc aggggatcat ttagatcctg cttctgatgt aagagatgat catctctaaa
                                                                     1320
attetgttee caagatgeag teetagegta gegaaegtte etggagtggg gtgaaggata
                                                                     1380
tcaatatact aagttttaac cagatacccc atttaggtca gcacttgatt cgttgttgct
                                                                     1440
gtgaaatatg tccatgggac aaaagaggga atatgaaata tttgcatatg ggaagattat ,
                                                                     1500
agagcataat aattttgtaa atggagcaat ctcaacctct atttctagat cacattttct
                                                                     1560
tgatgtette etteaaatta atgacettgg attacataag gatttetatg catteattat
                                                                     1620
aatttgttat tcctttcaat atccttgtat ttcaaatctt ccatataaga attagacatg
                                                                     1680
gcaattetta aattgattea gaatggtetg ataetattee agtateaeet cettaattet
                                                                     1740
gttteteete gtttteetga tttteettet cattetete tteecegete tgtetetete
                                                                     1800
tecetgicae tetetetete tegiteetta tittitgitt ettacetett aetgittaae
                                                                     1860
ctgttgcttc cttctggatt aatacattta gagccattcc tttatatggt cacatttcct
                                                                     1920
atgactttac tcaattactt ttaaaatcct ttctattctg agactaattt ttaagaatta
                                                                     1980
caaagctcat tottotgaat ctaatatcac taactcctag actttttccg ttttctttgg
                                                                     2040
atacacttta agtaggaatt tatcagaatt ttcattcaac tcgttcttta atgcagatat
                                                                     2100
ttactagtta taagacctta aggetgggtg cagtggetca egeetgtaat eccageactt
                                                                     2160
tgggaggctg aggcgggtgg atcacaagct caggagttca agaccagcct ggccaacatg
                                                                     2220
gtgaaaccct gtctctacta aaaaaaaaa
                                                                     2249
```

```
<210> 3508
<211> 2128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2129)...(847)
<223> similar to gi4929567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3508
ttttttttt ttatgtatat acgtgtttat tatatgctta ttacaaaaga aaaagtcttt
                                                                       60
tgccttattt tagggcttcc atgtaaaacc tagttaaaat acaaaaagta aattagagaa
                                                                      120
aaattctgct taggtagtga aaattgatag caacttataa gctgtatcct taaaaaccta
                                                                      180
gtcacagata tagaattacg taaagataaa atgataagcc tacttattgg caagaaacag
                                                                      240
gttaggccac ttaagcagca tgtttctacc actatacaaa tacatcggca ggtccaaaca
                                                                      300
ttaaaccacc attcgattga caacctttta tttttcaact taggtaacag tccaaaatca
                                                                      360
gtgtagattg gcgaaaaact aggcaaaaat agcaaaaagt gcagtttaat ttagcaaagg
                                                                      420
ctcaagacag tatgtggaag gaaggtgaga tttccctcct actgcggcaa ggcaagcggc
                                                                      480
agttactgcc cgacagtaac gatggtgtgc gcacccccga tgagaatgct gctgcaacac
                                                                      540
agactgggac gccgcctccc ccattagacc tgccagctca ttcgtgaaaa tctaccagga
                                                                      600
acacatcaat gaaaaaaata tgtcaaatat gagttetetg ttataagcaa taaaatcaca
                                                                      660
aaatcaactc agatttgaaa tttagggtaa gctaggacaa tttcctactt tttaatatat
                                                                      720
agatatttta gatttgacaa tcgtttccac atacactcag acaggcttac agaagaattt
                                                                      780
caaatatcaa atagagaagc tgttaattca cgcacgttat gacttcagtt aattcttcca
                                                                      840
gtgtttagac ttcagagctg ctaataacac taaactcaat accgtgtttg ttgagtctgt
                                                                      900
caatcaactt tgttttggaa aaagctgctc caggtgtgaa gaccccgccc gccttaggca
                                                                      960
gatgagaagc atcacttaga agagtcatgg ctgcctgaac catagctatg ggggtagcca
                                                                     1020
catagocago ctotggtoot ttoacotgag tacaaatttt gatatttggt ttgttottat
                                                                     1080
ctgtaccagt gccttggctg tatccttgac caaagaatgt cagcgtgaat gaggcagcat
                                                                     1140
caatctgttt ttgtgttggg ccttgttttg aaaaatagcc aaaggagaag aaccatggga
                                                                     1200
attttatgag aagttgcctt ccaattccaa acctcacaaa gaacaaaaag aaaagtcctg
                                                                     1260
caaacatcag cttaataaca gaggtgatgc ctcccacagt tacatacgca gcatactgaa
                                                                     1320
ctggtgattc ctctaaattt tcatacaagt aacgttgagt cctccttaca acagacacat
                                                                     1380
cagatcccat aaaaggaatg gaataacctt tgagttcccg acaataagaa attggccacc
                                                                     1440
ttctcttcaa ttttggacca atgagcggga caggtttcag atttgataca tttcttagtt
                                                                     1500
ttctcaaatt actctgatct ccaaaaccat aaattgctga cttccaggta ccatcatgaa
                                                                     1560
tgctcaaccc ctcaggtcct gaatgtatag tcaggaaact ttccacagca gtcaaagtac
                                                                     1620
cattcatttt atttctggta tatattactc ccagatctgc tggaatggag tcaaagccgc
                                                                     1680
tgcttccaat gatataaacc cctttgtctg cagctttctc atgatacttc agttgcatta
                                                                     1740
gttccagaaa ctgaggttct ccactgatgt cgatacaact ggctccattt tcaatacatg
                                                                     1800
cttttattac aggttctcca taaaaccgat atggtcctac gcaattgagg acaactgttg
                                                                     1860
cctgtttagc catttcatca agcgaggctg gattagcaat atcacagatg atgattccaa
                                                                     1920
cttcagatga cagtgttggt cttcccagct tcagggccgc cttctccagc acccgctgca
                                                                     1980
getteteceg ggageggeee gecaeggeee agggeaggeg ggageteege teegggteea
                                                                     2040
cctgctcccg ggccacctcc tcggtcacga actggccggt gaagccagac gcgccgaaca
                                                                     2100
ccaccaggtg gaaaggcctc tgctcggt
                                                                     2128
```

```
<210> 3509
<211> 1521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1448)...(888)
<223> similar to gil669601 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ctcataaaag tgacttccct tctctcagct tcattttcct tatacgtaga aacaagaaca
                                                                       60
agcaatacat acctcaagaa gacattgaaa ggactcaatt acttaataag acaacttaac
                                                                      120
atagogotag caaataataa cattoottag ttototttoo ttotactaco ottacagtgt .
                                                                      180
gtagaagacc atagctgcaa aatgcaggct tgataacttg agcaactgat acatttctct
                                                                      240
gattttgttt aattatatac ataaaggtaa gaggcctttt cacaggtatt aattaagttt
                                                                      300
aaaaataacc gccatccaac acaaaatagt atttcttgtt atatttcata aacagtctaa
                                                                      360
caaaacacta acaaagttat tttgcttatt attctgatgc tggaataatt tggtcaaata
                                                                      420
ttcataaata gttatcaact ttaccaaggc acaaaaatca agaatacatg ctttctataa
                                                                      480
actcatttac tactttaaag tttttaactg tttagcagtt ataggaaatt tttttaatcg
                                                                      540
aaaagaaacc tatttacatt tcaaatacaa aagaaaatta aaattattct tgattgatct
                                                                      600
ctaaaaccca accacttaga tgctcattat tattattttc tttcaccaat ccagtatact
                                                                      660
ctattcaaca tgtgcatcct gtgtacttac taagcattta tttgcacaaq qattttctqt
                                                                      720
gtcaggttaa ctttgctgtg tagattctgt gtagctacct gaattcgtcc aagaaaaagt
                                                                      780
ctcacatttt ttggaaaacc aatgctgcta cactgtttcc agatctgcct ccaaagctga
                                                                      840
acttgggtgt tggtagctct tcgagaagtt caaatccttc actgaattca tttagcaact
                                                                      900
cttccttggt ccaattacat gacgttatta gaaaaaaagc cttttacttt caacacctg
                                                                      960
gagagagatt teacatattg etteetette teaattgeat tgteaggatt aaggettatg
                                                                     1020
gcatcaaaag tccctttgtc aatacaaata tgaaatccag acagctgtgt ggagagattc
                                                                     1080
aaaaagtctt ctacctttaa cttaatgtta gataaacctt ctttttctat aatacttcca
                                                                     1140
gaaagctgaa ttgcagaagg agagtaatca attccagtaa tattagagaa accaaatttt
                                                                     1200
gcaagttcaa ccaggaaaac accatttcca gttccaatat caagcactga agcatccagt
                                                                     1260
ggaatettgt gtttetgeat écacettatt agtegattea tactetette tecaaaceag
atttcacctg tatctccata ttctcggaaa gtttgcagtt ctctctcata gacagcatcc.
                                                                     1380
caatgctcgc gggtccccag cgccgacggg acgaaaccgt cctccccggg actgcccttg
                                                                     1440
teegacegeg eegeeacege agegeeaceg eegeegteag egeeegaget catttegete
                                                                     1500
cacgtcctgg acggccgttg g
                                                                     1521
```

```
<210> 3510
<211> 1929
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1932)...(276)
```

<223> similar to gil354050 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3510
ttttttttt ttacagatca caggaatttt aaattgcaga tcagtcatgc tacttggggt
                                                                       60
gatcagaaag acttgaacac ttaccaagtg aataatttta ttaaggtcct gaaggtgagt
                                                                      120
gtccggaggt gctgggtaaa acacatcaca ggtaagaaat gggaaaccta cctcaqcatt
                                                                      180
totgaaaggo acaatotatg gaagggaaac otagogtaat aaaaccotca otggatgtac
                                                                      240
atggaaagga gtatggtgag ctatttcctt tttaaaqqat qaqaccttca taaattqqcc
                                                                      300
cctcggattc tggtgattcc cgccgcaagc gcaaatgctc cagtgtgtta tgaaaatgtt
                                                                      360
tgttaatctg ctctgtttct tcactggatt caagattcgg gaggtcttct cgaatctttt
                                                                      420
ggataagctg gtttaaaacc tgaattgtta ccgcatcatt ttccttttca taaaaataqa
                                                                      480
tatatctgtt cagaatttct ataaaaagct gcacttgtag agaggggtcc atgcactgat
                                                                      540
ttgctatttt tagagctttt tttaggcact ccattaccct cttgcctccg tgaagctcct
                                                                      600
ecceattttt gteegtgttt etgeeagaee agaagagatg tgeacaggtg eteacagete
                                                                      660
ggccctgatc aggtttcttt agaagtttgg atgcagcaag ggcacactga gtcctcagag
                                                                      720
gttcatgatt ctcttcactg aagcacttca tcctttcaaa agtgccaatg atcaaggtga
                                                                      780
tggcagctag ctgtgctttg gaatcgctga tttcatcttc atacagagaa aatgcctggg
                                                                      840
acatgaattc atatgcgact gtctcatgat tttcaaaacc aatttcccca gcagctagtg
                                                                      900
ctccttgaag aaaaagtctt aagggcaatt ctgccagctc tgctttgatc aaagcactga
                                                                      960
tagtctggtg ggcaaatgaa aaaatcttct ggcatttctt ttcccatttg tcatccactt
                                                                     1020
tagaattete tttatatega aaageeaget ggtaagetge aaataceaaa ggtggeagtg
                                                                     1080
tgaagcgaat ccgctgattt ccaccagctc caaaatgttt tcgtgctgtg ttcaaaatca
                                                                     1140
agtactgctg gtcagggtcc tcagagcgca gcagatgaat gaagcggccc acaaggctct
                                                                     1200
geteateage aaaatettet ggateagggt ettetaeagg ttgatetgge tgatettgaa
tcaacgtgga taccaaattc attatggaat ccacctggtc ttgagagaca atttctgtgt
                                                                     1320
tataatccag aacattacta agcacataac aactcatgct ctttctggac tcgtagtcaa
                                                                     1380
agtactcaaa gagtgggtga aaatgtttta atttcaagac tgttaaaaata ttqttqtaaq
                                                                     1440
tgtcaactgg tattttcaaa agtctggtga gttcctttga aactgcacta ctggtagcaa
                                                                     1500
tatgttcaag gttgagctta ttgaatatct ccactgttgt ttctagaact ttatcaacat
                                                                     1560
agtccacacg atcagggtaa catttcatgg caagattaat cagagagact tgtaaagata
                                                                     1620
caacateete tgaaggeatg tettgtetag actgtateae tgtageeace tgetgtgaaa
                                                                     1680
atatatcaaa aagtttaata teegetggga tteeaggtee atetteaegg tgagcaaata
                                                                     1740
aagctaatct atcaattaaa gcaatgatta tgttcttcac atttacattc tggtgtaact
                                                                     1800
cagcacagge cegaagaaaa ggatteaaag tetggaggtg aaatteatea gggaaaacet
                                                                     1860
gaataataca ctccatgaga tattcttgag ccaaagcatc cctacagttt acaacttgct
                                                                    1920
ccaatatgc
                                                                    1929
```

```
<211> 858
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (859)...(104)
<223> similar to gil654000 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3511

<400> 3511 ttttttttt ttggacttag caaggtttat ttggaagggc agagtccaac caaccccagg 60 teetgagggt agacteaggt cetgagggaa aggggtggae tteagtggge tttettgetg 120 tgttgggtgc tcttggggaa aggctgcggg cccagccaga gctgcagcag gatgacggca 180 tggcatatgt gcagggcagc agagctgcag gatgtggaag ggtatgtgtt ccaggagagc 240 tegatgagee ceageaceaa caacetgage aggtgtgtga geeagegtge aggeatggee 300 cacaggaggt agggcagtgt gtggaaatac cagacgtaga actggtagtg gagggagcgg 360 ctgaagcaga tgccaatgaa gttggaggtg aagagggtag aaacgatctg gttgggtgta 420 aggggctggg gtggaacctt ccttttggag ggatccctca gcagcgacaa gatactttcc 480 cctgtcctgt gccacctgca gagggcaaac agcaggagca gggtgaggtg ggcagtcaac 540 agggccaggt ggaaggctcg atgcaggaag agcgcctctg ggaggaagcg ccagttcact 600 gtccagtgga acagaaactg gcggccaagg tcaaaggagc gggacaggta gccgctgggg 660 ttctccagca ggaagggcag ccccagcacc acctgaaggc cagcacagat tcccagcttg 720 gggagggccc cacggaagcc aaactgtgtg aggagaagaa acagtaaccc aggggcgaag 780 agcagcacat tcatcttcac agagactgcc aggctgaaaa agcagcaagc cccagccca 840 gcgctgggcc agcaggag 858

```
<210> 3512
<211> 2613
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2167)
<223> similar to gi4768829 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3512
agaattgatc acttctctgc ttcacagtgg agctgatata cagcaggttg gatacggtgg
                                                                       60
cctcactgcc ctccatattg ctacaatagc tggccaccta gaggctgctg atgtgctgtt
                                                                      120
gcaacatgga gctaatgtca atattcaaga tgcagttttt ttcactccat tgcattttgc
                                                                      180
agcgtactat ggacatgaac aggtaactcg ccttcttttg aaatttggtg ctgatgtaaa
                                                                      240
tgtaagtggt gaagttggag atagacccct ccacctagca tctgcaaaag gattcttgaa
                                                                      300
tattgcaaaa ctcttgatgg aagaaggcag caaagcagat gtgaatgctc aagataatga
                                                                      360
agaccatgtc ccactccatt tctgttctcg atttggacac catgatatag ttaagtatct
                                                                      420
gctgcaaagt gatttggaag ttcaacctca tgttgttaat atctatggag atacccctt
                                                                      480
acacctggca tgctacaatg gcaaatttga agttgccaag gaaatcatcc aaatatcagg
                                                                      540
aacagaaagt ctgactaagg aaaacatctt cagtgaaaca gcttttcata gtgcttgtac
                                                                      600
ctatggcaag agcattgacc tagtcaaatt tettettgat cagaatgtca taaacatcaa
                                                                      660
ccaccaagga agggatgggc acactggatt acactctgct tgctaccacg gtcacattcg
                                                                      720
cctggttcag ttcttactgg ataatggagc tgatatgaat ctagtggctt gtgatcccag
                                                                      780
caggictagi ggigaaaaag aigagcagac aigtitgaig igggcitaig aaaaagggca
                                                                      840
tgatgccatt gtcacactcc tgaagcatta taagagacca caagatgaat tgccctgtaa
                                                                      900
tgaatattet cageetggag gagatggete etatgtgtet gttecateae eettggggaa
                                                                      960
gattaaaagc atgacaaaag agaaggcaga tattctcctc ctaagagctg gattgccttc
                                                                     1020
acatttccat cttcagctct cagaaattga gttccatgag attattggct caggttcttt
                                                                     1080
tgggaaagta tataaaggac gatgcagaaa taaaatagtg gctataaaac gttatcgagc
                                                                     1140
```

```
caatacctac tgctccaagt cagatgtgga tatgttttgc cgagaggtgt ccattctctg
                                                                     1200
ccaageteaa teatecetge gtaatecagt ttgtgggtge ttgettgaat gatececage
                                                                     1260
cagtttgcat ttgtcactca atacatatca gggggttctc tgttctccct ccttcatqag
                                                                     1320
cagaagagga ttcttgattt gcagtctaaa ttaattattg cagtagatgt tgccaaaggc
                                                                     1380
atggagtacc ttcacaacct gacacagcca attatacatc gtgacttgaa cagtcacaat
                                                                     1440
attettetet atgaggatgg geatgetgtg gtggeagatt ttggagaate aagattteta
                                                                     1500
cagtototgg atgaagacaa catgacaaaa caacotggga acotocgttg gatggotoot
                                                                     1560
gaggtgttca cgcagtgcac tcggtacacc atcaaagcag atgtcttcag ctatgctctg
                                                                     1620
tgtctgtggg aaattctcac tggcgaaatt ccattcgctc atctcaagcc agcggctgcg
                                                                     1680
gcagcagaca tggcttacca ccacatcaga cctcccattg gctattccat tcccaagccc
                                                                     1740
atatcatete tgetgataeg agggtggaae geatgteetg aaggaagaee egaattttet
                                                                     1800
gaagttgtca tgaagttaga agagtgtctc tgcaacattg agctgatgtc tcctqcatca
                                                                     1860
agtaacagca gtgggtctct ctcaccttct tcttcttctg attgcctggt gaaccgggga
                                                                     1920
ggacctggcc ggagtcatgt ggcagcatta agaagtegtt tegaattgga atatgeteta
                                                                     1980
aatgcaaggt cctatgctgc tttgtcccaa agtgctggac aatattcctc tcaaggtctg
                                                                     2040
tettiggagg agatgaaaag aagtetteaa tacacaceca tigacaaata tigetatigta
                                                                     2100
tecgatecea tgageteaat geatttteat tettgeegaa atagtageag etttgaggae
                                                                     2160
agcagctgac agcattcggc gtatacctaa ggagagtttt ttccccgaac tgacagcaac
                                                                     2220
gattccaacc acggcaagct ggcttccaac tataacattt tactctcaaa ggtctcctta
                                                                     2280
aattgggctt gtttttactt gtcctattta attccccact attagcaggc tttggatttg
                                                                     2340
tgcctaagga ataatatgca aaagaaccaa gacagaatgt atatgaagaa ttgtttttaa
                                                                     2400
ttttgtaaat taaaaaaaaa tttagatcgt tacttggaaa tggagcctaa gtctgtggtg
                                                                     2460
gacagataat aattatgttt tcctgggctg aattatgtag acttgtgttt gacagctatg
                                                                     2520
ggtttatttc ttagaacatt gttcattttc ttttctcatt atgttacttc tagtgttcac
                                                                     2580
ctctgtgatt aaagattctt tggtgaaata gaa
                                                                     2613
```

```
<210> 3513
<211> 5264
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5265)...(155)
<223> similar to gi3015538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3513
ttttttttt ttggcgttag ttctctcttt atatagactc tggttctaga aactcgcctg
                                                                       60
cagccgctgg ctggaccagc acacgctgac ggggccggac tatttacagg cccattgcgg
                                                                      120
getgtacett ggccacetee eggcaeggtg eteagetgtg aegccaaaat aagttaggge
                                                                      180
cggccgggcg gggcggggcg gggacggggg ctgtacacac aagtgctggg ggctcggggc
                                                                      240
ctcaatactg tcgagggccg gggctgtaaa catggccggg gcggccctgc ccacccctag
                                                                      300
tggtcggtaa cgaccggaag cagagcagcc gggcagggct gggaggctca ggcgtccgac
                                                                      360
aggcagetet ggateeggte cacceaetge tgggeegagg geaegteetg ggeaeagaag
                                                                      420
ttgtaaacgc gacgcgttgt cttcacgtca aagaaggcct tctcgtccac ggtcttaggg
                                                                      480
gcacccatag tgggcgtgcc aggtgccaca gcctccacct ccgccaagta gatgacaccc
                                                                      540
ttgcactctg tgtccacacg gtggtcgtag tagcgcagct ggtgcttggt cttgtccagc
                                                                      600
acgaaccage gggccttcca aggcttcatg aaggccccct tettgtacag agtgccctcg
                                                                      660
taggacetgt teteactete tgetgtetgg aactggetgt acagggtget ggtgetgegg
                                                                      720
```

```
cgggcagcet gacgggagec ggatgtggtt gagccactae tetggteget gtecaggetg
                                                                      780
aggeteaggg tggageeeae gggeeeetee tgeaggtaca cacceagega gegaeggtgg
                                                                      840
 tggggtgcgg tggacacaag gagggagcta ggggtgccac ggccgtctgg ccggccctcg
                                                                      900
aggegetgtg cageetteae eeggteeeag gtgteettee agegeteage gggttggeee
                                                                      960
aactotgtot coagoototg cagotootoo agoaggogtg agatggogto aggotgggoo
                                                                     1020
cgcgggcagc tgtcgtaaca gggccacacc acgcggcgcc tgctctgggg agcgcctcca
                                                                     1080
tcagaccgtt cttcctctgg gggttcaggg ggcccctggg ccagttccca gtcataggga
                                                                     1140
gggccctcgg ccagcgtctc ctcagtgtag aagtcccaca ccttcaggtt ggacacgttg
                                                                     1200
ctgtagggcc gcaggacctc tgcgtcctcg ggcgcataca tgtaattgtg gaacacaggc
                                                                     1260
gtcctcttgc tcagccggtc cacatactcc cacacagacc tgcacggcac ctggcccctg
                                                                     1320
cgttccccct tctcctcata cagcagcccc agctcaatgc gctcatagtc agagtcgagc
                                                                     1380
aggaaggtcc ggaaacggcg ggacacatgg tggtagccga ggaacttgag gtagaactgg
                                                                     1440
ctgaactcaa actccatggg gaactgcagg tggacctggt gtacgcagtc caggaactgc
                                                                     1500
aggaagacgg gtgtgaagcc gctgctctgc ccggccaggg tgtgagctcc acggtggctg
                                                                     1560
aagcgatggc cgaaggacag ccactccttc tccaccagca ggcgaaagcc ctccagcgtg
                                                                     1620
cggtagaagg ggtctgagag cagctgcacc aaggatacca cctgggtggt gatgtcccag
                                                                     1680
ccatcctcca ggcccaccag cacggaggag cctgaatcca ggagctccac caccagcaca
                                                                     1740
gacacctgca gcagcttgtg gatctggatc agccactctg agtcctccag tgagcgcagg
                                                                     1800
aaggaggetg ggetgggete ageagegggg cageetggga cacatgettt cageagttte
                                                                     1860
ttgaagetag cetteacetg cegtgeeteg aataceteaa tgggeaceag eteceaetge
                                                                     1920
tgcagggggt ctgaccgcac accettgage tgggetttgt ccccaaggat atagaggget
                                                                     1980
gctcgctgcg gacgcaggaa gcccgggtcg ggagggcccc cgttggcctg gggtggggcc
                                                                     2040
agegegtete tgecagetag cegggageee acateggtge caaggeeact getgegteea
                                                                     2100
ctggtccgga cactgcccca cttaccgtga ctgcccatgt gggctgagga gaagccgcta
                                                                     2160
agcgtgttgc gtcccgacgc gtcggcgtag cggggcatgg agctgaccac agcctgcagg
                                                                     2220
tactteteet geteeagget actegagtee geetgggaet ggeetggaga aggtgegtte
                                                                     2280
tgggccttga agaggccgac gacacctttg ccatgcaggc ctccagagcg cagcagcacc
                                                                     2340
gccttggacc gcccgctgcg ccagcagacc acggggaagc ggttctggcg atagcagcgg
                                                                     2400
gacacgcgct gcagggcgtt gtcctggaca ctctggggca cgatcagcag ccctgggtag
                                                                     2460
ctgcggcaga tggcatacat gcggttgacc ggagaaatgc ggaaggctca gacttggccc
                                                                     2520
ggetcagget getgetcagg gtgeccagac cgaggegetg gtagtegega cagcaageec
                                                                     2580
tttccaccag gctgctcatg gtcatgcggt cggagggctt cagggctgag gacggggtca
                                                                     2640
gegtgetggg etecagetee teegacactg agatetegte etectggtee teaggggggg
                                                                     2700
getggeeceg gtgeteceag etgggggggt tgtacttett gegagtgaea tgetgeegee
                                                                     2760
cgatggtctt cttggcgttc ttgaccaggt tccgggacag ggttctgagg gaaggaccct
                                                                     2820
tgtccttggt gactcgcggt ggccggccag gtgtgtgggc agagcccaag gtgaacgcaa
                                                                     2880
aagttggcca tgattgttcc ggcgggtaac cgcagcttaa tgcagctgcc ttacggaaag
                                                                     2940
ageteggget etgteagace ecaceteete gteaaaggee atttteagea getggaatgt
                                                                     3000
gcaggagcgc agctggagcc cgtcctgcag gagctggtcc cacaggggtc tggaagctga
                                                                     3060
tgcgcttctc cttggtcagc gcagccaccg ggaaggagcg gaccaccacc tgctcccaa
                                                                     3120
ccagggggtc cgtgggcatc cccgtgaaga tgacccggta cgtggtgagg aagacggcgc
                                                                     3180
cctcagctgg ggagcaattg tggtccccca gcactgcccc ccgcgccctc ctcacgccca
                                                                     3240
teeggeagea ggtagaegeg caggeegtee ageacacat ceteaceegg cageaggege
                                                                     3300
ggccgcagca gcttgggctt ctggatgggc ggcagcctcc ggctctcccg ctgcacggcc
                                                                     3360
tccagggtct cgatgtgcat ctggacaatg tctggcacca tgacatgcag ccccttgagg
                                                                     3420
tggtcgctgg tgaccccact ctccgtgcag accttgtcca caaagcggtt gatgaagcgg
                                                                     3480
accacagece cagetacgte geaggtetet geatectega agecgetete egtgteatag
                                                                     3540
ctctcggcca cactgccagc catgctgttg gtgaccaggc tgttgctggc gctctccagg
                                                                     3600
tegeceagee eggeaegete cegaagtagg eggetettge tgetgteeag gggeaggagg
                                                                     3660
aggtagetea tgeggttgge atagtggatg geetggetga acaeegtget etecteette
                                                                     3720
tgcaccaget cetgetgett etcacgaete agagttggee acaagegeeg etgeteagaa
                                                                     3780
gccacgtcta gggcagagcg ctcgtcctcc tgggaaggtg cctccccaac ctcctgggcg
                                                                     3840
ggggccaggt cctctgtggg ctccaggtag agggcccgga tgtgagtctg cacatcccca
                                                                     3900
tagaacatgg ceteecagaa etgtggegtg etecaeacea egtgeteetg cacacagetg
                                                                     3960
tatgcaaact gcgtcacccc cgggctcagc ttccggcaga aggctgtgac cagaggcagc
                                                                     4020
agageegeeg caatgeeatg etegteeaga gaagtgeagt eetgeaggea geagtteate
                                                                     4080
atacggacga caaagtcaaa ctgctggtgg tccaggaccg cacggttctg ctgcacatgc
                                                                     4140
```

```
aggtgcaget cetgggcgag gcageggegg gcagetegee cettcaggge cetcaacacg
                                                                     4200
gctgggagca gcttcttggc ctcaagcatt ttcccctcaa acacgtagga gatgcagttg
                                                                     4260
egeacaacet ccageegeeg ggegetgttg acatgeagee caetgeaceg etccagtatg
                                                                     4320
geagteatgg ggggeeetga gggeaeggtg gteeteetet eggeetteae agetgggggt
                                                                     4380
gcaccetgca tettggetge ageetggtee acgatecact gcacggtgee eteatecage
                                                                     4440
cgggggaagg gtcggggcac ccgtcgcagg tggctgctct caccgggcct ctgtaccttg
                                                                     4500
tgcatcgcca cggctgggta cgggttctcg ttcttgtaga gctgctctgc cagttcctgg
                                                                     4560
acgtgacgca ggacacgctg ggggtggttc tcatccgccc gcatccttgc cacctcgtgg
                                                                     4620
gccaccagct catcgaacag gtccgtaggg cggtatggga ccccacgctc tgacacaaag
                                                                     4680
ccagcaaagg ccatgccctc cagcaccttc atcaggaaat cgtcctctac cagcccacgc
                                                                     4740
tggcccagga aggctgcctt atggaagcgg atgacaggct ccgggtggat gcgcacgacg
                                                                     4800
tgcaggcacc agcgatagcc ctgcagcagc tgagcgaaca gccgcaggaa gaccgcgcgc
                                                                     4860
agctccttgt cctgcatctt cagggaggag gtggatgtcg tgggcggagg gaaggcgagg
                                                                     4920
tragccaact cragetrogg gtrcaggace atgetragea cartgtgegt etgactetge
                                                                     4980
agtggctctg gcaagggtgg aatgtgcaca cactcaggaa tggtgaccgt ccctccatcc
                                                                     5040
agatcagcaa caatcacatc gagcagetee tgggtetetg cetggaagge egegttgace
                                                                     5100
ccaatgatga agggcgtggg tgtgctgagg acctccagca gctgagccgg caggatgggc
                                                                     5160
acataggtga agctgtatct gagaggaaac agcagtgcca ggaggcccct acaggcatcg
                                                                     5220
gcgagccgct ggtagctccg ggacaggaag acctcgtgcc gaat
                                                                     5264
```

```
<210> 3514
<211> 3376
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2332)
<223> similar to gi3043740 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3514
ggeegeeace cacceccaga tggtgggtee ggaggatgee ggageetget egggaagaaa
                                                                   60
120
ggccacgggc ggctttggcg gaggcgtcgg cgctgtggag ccgccggagg aggctgacga
                                                                  180
ggaggaggag acgccgcctc ggcagctcct tcagcgttac ctcgcggcgg ccggggagca
                                                                  240
gctggagccg gggctctgct actgtccgct ccccgctggc caggccggcg ccccgccgcc
                                                                  300
ctcggcagcc ccacgatcgg acgcctgcct gctgggctcg ggctccaaac accgcggcgc
                                                                  360
ggaggtggct gatggccgcg cgccgcggca cgaaggcatg accaacggcg actcgggttt
                                                                  420
tetgeeggge egggaetgte gegatetgga agaggetege gggetggege gegeeggegg
                                                                  480
ccgggagtcg cgccgccgcc gcccctacgg ccgccttcgc ctggaggggc ctggcgacga
                                                                  540
ggacgcggac ggcgcgggaa gcccgtccga ttgggcctct ccgcttgagg acccgctgcg
                                                                  600
gagetgetge etggtggeeg eggaegeeca ggageeegag ggegegggea gegaeteggg
                                                                  660
ggacagecee gecageaget geageagtag egaggaetea gageageggg gagteggege
                                                                  720
cgggggtccc gaggagggcg cgcccctgc cacctcggcc gagaggacta atgggggtgc
                                                                  780
ggagccgcgc ctgggctttt ctgacattca cttcaactct cgcaacacgt tccaggtgag
                                                                  840
ccgcggtcag agcgcccgcg atcacctgcc cccggcgggg ccgccggtgc ccttgcccgc
                                                                  900
cgcggagcag ggtcctgcgg gggcttcggc ccgggctcga cggagtggcg gcttcgcgga
                                                                  960
cttcttcacc agaaaccttt ttccaaaaag gacaaaagga cctcaaatca gttgtccata
                                                                 1020
gtgctcctgg ttggaaatta tttggtaaag tccctcctag agagaatctt cagaaaacat
                                                                 1080
```

```
ccaaaatcat tcagcaggaa tatgaagcac gaacggggag gacctgtaaa ccaccacctc
                                                                     1140
agtetteaag acgeaagaat tttgaatttg ageegettte taceaetgee ttgattettg
                                                                     1200
aggatcgacc atcaaatctt cctgccaaat ctgtggaaga agctttacgt caccgacaag
                                                                     1260
aatacgatga gatggtggct gaggctaaaa aacgagaaat taaggaagca cataaaagaa
                                                                     1320
aaagaatcat gaaagaacga tttaagcagg aagaaaatat tgcaagtgca atggtaattt
                                                                     1380
ggatcaatga aatactgccc aattgggaag taatgcgtag tacaagaaga gttcgagaat
                                                                     1440
tgtggtggca gggattgccc cctagtgtcc gtgggaaagt ttggagtcta gctgtaggaa
                                                                     1500
atgaactaaa tatcactcct gaactttatg aaatcttcct ctcaagagca aaagaacggt
                                                                     1560
ggaaaagttt cagtgaaaca agttcagaga atgatacaga aggtgtatct gttgctgatc
                                                                     1620
gagaggccag totggaatta attaagttgg acatatocog tacatttoca totototaca
                                                                     1680
tctttcagaa gggtggtcca tatcatgatg tcttgcatag tattttaggg gcatacacat
                                                                     1740
gctacaggcc tgatgttggt tatgtccaag ggatgtcctt cattgcagca gtactcattc
                                                                     1800
tcaatttgga agaggcagat gcctttatcg catttgccaa tctcctgaat aagccatgcc
                                                                     1860
agttggcctt ttttcgtgtg gatcacagca tgatgttgaa atattttgca acatttgaag
                                                                     1920
tattetttga agaaaatett tecaaattat ttetteaett caaatettae agtettaeae
                                                                     1980
cagatatata cttgatagac tggatcttca cactatatag caaatcacta ccacttgatc
                                                                     2040
tggcctgtcg agtctgggat gtattttgca gagatgggga agaattttta tttaqqactq
                                                                     2100
gattaggaat cctccgatta tatgaagata ttctcctgca gatggacttt attcatatag
                                                                     2160
cacagtttct aactaaattg ccagaagata tcacatcgga aaagctgttc agttgtattg
                                                                     2220
cagccattca gatgcagaat agcaccaaaa aatggactca ggtctttgca tctgtaatga
                                                                     2280
aggatattaa agaaggagac aagaacagta gtcctgcttt gaaaagctag tcttcaaaat
                                                                     2340
tgacagacta actgacatag aaaaagtggt ttttggataa aggttttttg tttcctatgt
                                                                     2400
aaaaggcgtg gaagaaaatg ttggagatac ctaaaagaat caagaggtgg aaaactgctg
                                                                     2460
attttacatt ttatggctga agtaaatgaa ataagtaact tattgacagt attaataaac
                                                                    . 2520
tattattttg tagggtaggg tcatttttc aaagggaaaa ggttttaagt ggtgagttta
                                                                     2580
tattccacaa tttggagtaa acaaaatgca ataaattttt aaaatagctt tgaagatact
                                                                     2640
tcaaattttt acatcttttc ttttgtaaca gttaccacaa agatattctg gaggctagag
                                                                     2700
taggattgtt aaatactact gttaacctcc aaagtactat agtacagaca ttgtttccag
                                                                     2760
ttctgacctt ttgaagatat tatagaccag taatgaacag atttggttgt aaattattta
                                                                     2820
agtcactgaa gatgtcattt atcttcattc acaagttggg gcaaattcga gttacctagg
                                                                     2880
aactggaaat gttggtggga gattgtttat tgtttgttta gatgtttttc catagtatgg
                                                                     2940
tgtcccattg gttttttaag ggaaattttt ggtcttccct taagggaatt cctatcactc
                                                                     3000
agagaatttt agccattctg ggttctagtc taaccaaatt attcatccta ataatttgac
                                                                     3060
attaagaaaa cctataaata actggtagaa ggaaagtgct ttgcacttca gtggattgaa
                                                                     3120
gacttgactt tgagagtaag tccaaaaaca tatatgatgt ttctcagtga taagagtaaa
                                                                     3180
aagtaatgaa teetgagagt tettaaacag catgetaett ggeaagaett catattttt
                                                                     3240
agttacaatt cttccactgt ttaactccag tttgaaattt gaaatctaat atgtagctaa
                                                                     3300
atctgtgact tgtaaaactc tatgcataat ttttcctaat cagtggaaat aagaataaaa
                                                                     3360
gaaaaaggta aagtta
                                                                     3376
```

```
<210> 3515

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (17)...(1309)
```

```
<400> 3515
ggagcgcagc ctcaagaagc gccagtcgct gcccgcctcc ccacgtgccc gcctctccgc
                                                                       60
cagcaccgcc totgagetea geoccaaate caaggecagg ceatectete cetecacate
                                                                      120
ctggcacagg cctgcctccc cctgccccag cccagggcca ggccacactc tgcctccaaa
                                                                      180
gccaccgtcc ccccgaggca ccactgcatc ccccaagggg cgggttcgga ggaaggagga
                                                                      240
ggcaaaggag agccccagcg ccgcagggcc cgaggacaag agccagagca agcgcagggc
                                                                      300
cagtaacgag aaggagtcag cagccccagc ctcaccggca ccttcgccgg cgccctcgcc
                                                                      360
caccccagec cegeeceaga aggageagec eccegeggag acceetacag aegetgetgt
                                                                      420
cttgacctca cccccagccc ctgctccccc ggtgacccct agcaaaccaa tggccggcac
                                                                      480
cacagaccga gaagaagcca ctcggctctt ggctgagaag cggcgccagg cccgggagca
                                                                      540
gcgggagcgc gaggagcagg agcggaggct gcaggcagaa agggacaagc gaatgcgaga
                                                                      600
ggagcagctg gcacgggagg ccgaggcccg ggcggagcgg gaggcggagg cccggaggcg
                                                                      660
ggaggagcag gaggcacgag agaaggcgca ggccgagcag gaggagcagg agcggctgca
                                                                      720
gaagcagaaa gaggaggccg aagctcggtc gcgggaagag gcggagcggc agcgtctgga
                                                                      780
gcgggaaaag cacttccagc agcaggagca agagcggcaa gagcgcagaa agcgtctgga
                                                                      840
ggagatcatg aagaggactc ggaagtcaga agtttctgaa accaagaagc aggacagcaa
                                                                      900
ggaggccaac gccaacggtt ccagcccaga gcctgtgaaa gctgtggagg ctcggtcccc
                                                                      960
agggctgcag aaggaggctg tgcagaaaga ggagcccatc ccacaggagc ctcagtggag
                                                                     1020
teteccaage aaggagttge cagegteest ggtgaatgge etgeageste teccageaca
                                                                     1080
ccaggagaat ggcttctcca ccaacggacc ctctggggac aagagtctga gccgaacacc
                                                                     1140
agagacactc etgecetttg cagaggeaga ageetteete aagaaagetg tggtgeagte
                                                                     1200
cccgcaggtc acagaagtcc tttaagaggg tttgccttgg atccgggcac agttgtgagg
                                                                     1260
gctcctctgc atcacctacc aggatgtctg gaggagaaaa agacagaaca aagatggaag
                                                                     1320
tggcctgggc ccctgggggt gggtcctctc tgttgttttt aatctgcacc ttatagactg
                                                                     1380
atgtetettt ggeeggagee agatetgeee eteagtgeat tegtgtgete geaegegeag
                                                                     1440
acatecette teccecatae acacatatae acteacagee tetetggeet ettecettgg
                                                                     1500
ggaggggcca cctgtagtat ttgccttgat ttggtggggt acagtggatg tgaatactgt
                                                                     1560
aaatagcttg tgctcagact cctctgcgtg gagagggtgg gtgcaggagg cagacctcc
                                                                     1620
ccccaaagcc ccctggggag atcttcctct ctctatttaa ctgtaactga gggggatccc
                                                                     1680
aggtctgggg atgggggaca ccttgggcca caggatactg gttgcttcag gggtacccat
                                                                     1740
geceeetgee etegeetgga ateagtgtta etgeatetga ttaaatgtet ecagaaataa
                                                                     1800
agaataattc tgccaaaaaa aaaa
                                                                     1824
```

```
<210> 3516
<211> 1992
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1993)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1995)...(154)
<223> similar to gi2988397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
. <400> 3516
tttttttttt ttgtggtgga tgagcactgg ggactttatt acacggaacg gcactcgtga
                                                                       60
caacggaagg ggtgggcaga aatgcaggcc ggaacattcc accagtccag ggacggttgg
                                                                      120
tcattcagaa agtatgtatt tccagaacac tcagtagtaa ggccgtctgg gattgttcag
                                                                      180
ggggttgggc cggaagcggt aggccagcat catcetettg cggaaacgcc ttatacttet
                                                                      240
ctgtcctcct tgaagagctc cgccggccgg tcaatgccga agccaagcgc cgtccactgt
                                                                      300
ggtggtgccc ttgttcactg ggttcttgat ggccctggcc ctctgagccc agcccctcgc
                                                                      360
cctccttcca gcccatcttc atcagcatgt ggtagccgat gttctccaca gtcagcttga
                                                                      420
acteettgta etetgagtag teaggeteae ggeeeteett eaggggeett gaaggtetee
                                                                      480
ataaactttt ccagctcgtc tggaggcagg aagtctccga tgaagtgctt gccccggccc
                                                                      540
atctttgtca gctgctcggc ccattccctg gtcttatccn aacttcccat gcgcccgcaa
                                                                      600
gctggtgctc cccagtgccc agactcgttg ccacctccct atcactgtga tagcccgcct
                                                                      660
tgtgctgttg gactgccttc tcccacagca gctgcatgtc ctgcatggcc cgcttgtgct
                                                                      720
geatgateat gregtaeate tgergeater cergergere erreagerge tretrergg
                                                                      780
cgtctgaaag ctctgtgacg cccactagac ccacaggctt ccccttctca tagccgagcc
                                                                      840
ccttgaggtc ctgaactgac agaggcgagg gagaggcatc cacgtccctc tgcaccagtt
                                                                      900
cagcaggtgg gagctctacc ttaatcctct tcaggccccc accggctctt ccgcttcctc
                                                                      960
ttcacggtgg ctgcggaggc tggcttcccg ggggcagctg gagcagggat gatagtgggc
                                                                     1020
gcaggcgtgg acgaggcggg gcaggtggtg gctgggggta aggaccctga cagggcctca.
                                                                     1080
ggaggggact tgcgcttcag gccgggatca ggtgctgtga aagctgcctg tggagctggc
                                                                     1140
ettggettte eggaacteet ecagettetg teggtagtae ttgtaceett ggetattggg
                                                                     1200
ctcatacaga aagctgaatg ccctggttct cacggttgtt ctggagggca atggtttcca
                                                                     1260
cctcggaacc cccgtccgct atgaacctgg ccaacttttc tgcaaggttc ttgacctctt
                                                                     1320
cgtcctctgg gggtgaaact ttctgagagg ctgcctgcga cttctgtgct tcctttctta
                                                                     1380
teteageeae ettetteetg tagtagagga attecetget attettateg tgeaaaaatg
                                                                     1440
caaatgctgg gttatccttg tagtcctcca tagctacttt ttctaactcg gggcctcctt
                                                                     1500
ctgccacaaa gcgggccaat ttctctatca ctttccgagt ctcggctccc tctgggggtg
                                                                     1560
aaactttgat ctccagccac tgctcatagt cctcctcctc gtcctcgtca ggggactgga
                                                                     1620
agacactegg geggtgegec aegggeaget gettggegtg ggagtagete tteacaggge
                                                                     1680
ccggcaggct ggccagcccc aggcctgtcc gcctgctgat gagcagggac ctcttcccag
                                                                     1740
cgttcagaaa ctgctgcaag aagctaccat cgttggcaaa cttgttggaa atgcaggaag
                                                                     1800
agttgtgtgc atttgtgatt tcgccaggat gtgggggctg agggctggcc acctgattct
                                                                     1860
gcttggcttt ctgttccatt ttggcttcaa tttcccgttt cttctgagcg atgagctctt
                                                                     1920
cctggtgaag gatgttcatg ttcatttttc cagatttagg gggagcaacc ccaaaccacc
                                                                     1980
ggttagcctt tc
                                                                     1992
```

```
<210> 3517
<211> 1960
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1962)...(1307)
<223> similar to gi1510143 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3517
ttttgacttt gcaggatgtg ctttatttta agtcagccct gaacccaaac tacacaggat 60
caatttttga catattctag tccattcaat gattcttctc agaaactgta tcttaatatg 120
```

```
gaatgaaaac tacatttcaa tcataaattt ttcatgctac attgttattt aatgaagagg
                                                                      180
ttgtattacc aataataata atttaagaaa aggccatttt tatttcccca agctcaatat
                                                                      240
acatatttct ttcataatta tgaacttaaa aaaacccgtc tcagatgtaa aaatgtgaat
                                                                      300
tggaatatgt aaactetttg atatacetga aaaacaggaa ggaaaatgte acatactggg
                                                                      360
aaaacccctt ccctttaatc atggaaatgg gaaaaagccc gtttaaggaa agggaaqqcc
                                                                      420
aaaaaaccgt tcctgacctc agtttttaaa aaggttccaa gtttttttgg gccccctggg
                                                                      480
gtggtctttt tacttttttg cccccagttt gtttgcccag gagaccccag ccctccagaa
                                                                      540
tggtttccct ccttgaaagt ggtccctggt gggcccaaac caaaccgggg gtcccccct
                                                                      600
ttgttttgct cccttttttt ttttttcctg agaagtcact ggtgtttaat ggaaaggtat
                                                                      660
cctattagtc cttggttaag ataaggcagt aagagtatca ctaatactat gtttttgctt
                                                                      720
agaatgagge tgateettte caetggegte tteaegggea attagtteee tetettttge
                                                                      780
tectagaaac acaggtagga getgtetgee ceetattget gttgcatttt cetgagtgtg
                                                                      840
ttgaaggete atetagtete ateacaagea getteeceag tggggatggg agegetgtat
                                                                     900
attgcattgt agcatctctc caaggaaagt gcacggggcc ccaacagggg aaaacaccag
                                                                      960
gcatctttct ttctgactcc tcttctgttt ctcttagggg acggggccca taaatqattc
                                                                     1020
cttcacatga tcaatcagaa tgcgagacac tgttgactaa aacataaagc aagtagccct
                                                                     1080
gatttcagag aaatggagtt acaaataaca ttttcaacag tgccttaact tqcaaqqtaq
                                                                     1140
cttttactgc agaaggatat cagctccttt tgtctaccta tcagaagaga aacaaaccat
                                                                     1200
ttccgtcgaa ctagaaatgc ttagctctta tgagaatatt gtqcttttaa aaaaaattca
                                                                     1260
aatgttaaca ttatttgcag tetgtgttet aaggttteaa tttgtttttt etetagteca
                                                                     1320
tttgatcatt gtctctggtg agcgatatag gaatattaat ttggcataga gatcttcttc
                                                                     1380
tagetecagt teteetgtet etegaactaa aaaaatatet gtgeacaact teaaaatteg
                                                                     1440
atcccacatt tggaagctcc ttcaaacatg atggagtgag aaatcccact gaagaattca
                                                                     1500
cggacaaatt teccaateae aaggacaact gaagcatata ateccataat accatageca
                                                                     1560
gcccaggaac cccagacttg ggggactgac tttgtcattg aagaccacca gttccagggc
                                                                     1620
ctgagagttc ggattgtata ttctgtttcc agtcaggttg agaacccacc actcactgtt
                                                                     1680
atatttagtt gtattgtctc tggacaaaat gatggtaata tccatgaaat tattttcaga
                                                                     1740
taaaagttgc tttataggtt ttgagttaga atcactaggt gctttcacat aatatqqata
                                                                     1800
aatcttttct atggtcactg gtgtttttga actttctgtg ctgttgcctq ctatcatttt
                                                                     1860
agcgatattc tttcgagtaa tatttttaag aggaaaagaa agcttatctg ttgctatttc
                                                                     1920
cgattttgca cccagactta agtttctctg aatactccat
                                                                     1960
```

```
<210> 3518
<211> 1031
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (940)...(426)
<223> similar to gi2228750 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3518

ttttttttt ttttt tttttt ttaaaagta taaaaccagg cttactcctt 60
caaactgctc ccacccctaa ttatctccac aaagagctat ataaattggg caggggtatg 120
tgtacagtca tctcagctct aacaaccca gttcttctt caattctcct ttctcccttc 180
atacaattga gatgtttgtc ctttgcactt tccccaagat agcaaaggtg atacaaatgt 240
ggaaggaggg gaagtgtaga aaataaactg tcatcatcct ctattcccat ctccagggaa 300
cagacagatt atatgaactc tgaccaaatg atttgcttgt ctgaagaaac aaataatagg 360
```

```
tacagttact ctctgtatcc taaagaaaga cacgagggtc cagagteett ettcagtata
                                                                      420
tageetegte catattgtea teactgteae caceaaagte etetecattq teaaaatatq
                                                                      480
acatgatgta atcagtttcc tetteatgtt ettetteate atactettet tetteeteet
                                                                      540
ettecttete ttettettet tettteteet cateeteete tgaagttaet tettetteet
                                                                      600
tettetecag ggtetetagt ttetgtattg ttteeteett atettetgtg gtettagggg
                                                                      660
gcctcttggg gagcagaatt gtaatccgtt ccttctgtag cttccgcact cggatcttta
                                                                      720
gctcccgggg tagacgccgc caatcagggt tccaatcgat ggcattgtca atcggacctg
                                                                      780
acatetgata tttgtetgaa taaegeteea eatetetett ggggaeaget ggeeggatga
                                                                      840
agtaggggag etgecteatg geteetegta getettgett eagtgeeagg acatatteee
                                                                      900
cttcctcgcc tgagggcaaa ggtactgggc gcaactccaa gggctgctgc ccctccccaa
                                                                      960
ageggageee aageegegae caacttgaaa tgtaetggge tteetcaagt egacaeggea
                                                                     1020
                                                                     1031
```

```
<210> 3519
<211> 754
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (731)...(55)
<223> similar to gi673456 in the genepept database release 114,... Run with FASTXY 3.3t00, default parameters
```

```
<400> 3519 ·
ttttttcac caaacaaaac aagattttta atgtgataat ggattgccta tttcacatgt
                                                                       60
taaattgctc tatgcaggga gatttcacaa tccaggatcc atagccatgt tgttgtaagt
                                                                      120
aggatttcaa cttacattta gcttcttgat aggaggcaga catacactta gctgcatgat
                                                                      180
atgtaccage tteaagtaat tettttttag ettetttgge aageaggtta aaceqaetta
                                                                      240
acatttgcag ccttacaaag ccgacttgcc attgacatac cacttttaaa tqqqqaactt
                                                                      300
teaagtgate tteecactea ggeeatecae aateteeaaa gaaacatete ettggtgeee
                                                                      360
aattcagact cagaaattta tattccaagt tcatttgaag gggatatgca gagggtacta
                                                                      420
aactaatatg aggictgitg actaagtaaa acattggaag tittgaagtg agtgcatcat
                                                                      480
caacacgttg ctttatagcg atttctaagc ctctggtatc actgcaattc ccatcaccaa
                                                                      540
taagtatact gctgatgtaa actggctgta taaaatgact cagcaatgct ccctgtacac
                                                                      600
caagcacttc ccatctggtc aatttgtcac ttgaggacat actgcttatt ctattaacac
                                                                      660
catctttagg acagtaaaca gtcagataaa ttttgccttc aacagccacg tggagacaga
                                                                      720
gttcttcatt cggacgcgtg ggcggacgcg tggg
                                                                      754
```

```
<210> 3520
<211> 1815
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (3)...(1815) <223> similar to gi4529897 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3520
acctccagge tgcaaaactg gcccttctag cctccatcca ggccttcage cttctgcgaa
                                                                       60
gccgcctggg agacagggat ttctccaggc tgctggacat caccccagcc tccaqcctga
                                                                      120
getttgteet ggacaceaeg ggeageatgg gtgaggagat caaegetgee aaaateeaqq
                                                                      180
ctcgccacct tgtggagcag cggagaggca gccccatgga gcctgtccac tatqtcctqq
                                                                      240
tgccttttca tgacccaggg ttcggccctg tctttacaac cagtgaccct gacagcttct
                                                                      300
ggcaacaget taatgagate catgeettgg ggggtggaga egageetgag atgtgeetgt
                                                                      360
cagecetgea getggeeetg etgeacaeae etceaetete agatatettt gtetteaegg
                                                                      420
atgcctcccc caaggatgcc tttctcacca accaggtgga atccctgact caggagcggc
                                                                      480
gctgccgggt aacattcctg gtgactgaag atacatcaag ggttcagggt cgagctcggc
                                                                      540
gtgagatett gteceetetg egttttgage catacaaage agtggeeetg geeteaggag
                                                                      600
gagaggtgat cttcaccaaa gaccagcaca ttcgagacgt ggcagccatt gttggggaga
                                                                      660
gcatggctgc cctggtgact cttcccctgg accctcctgt tgtggtgcct gggcagccac
                                                                      720
ttgtgttcag cgtggatggg ctgctccaga agatcacagt ccggatccac ggagacatca
                                                                      780
gragettetg gatcaagaac cetgeagggg teteceaggg ceaggagaag egggggteet
                                                                      840
ctagtcacac tegeogettt gggcagttet ggatggtgac catggatgac cetecacaga
                                                                      900
caggaacctg ggagatccag gtcacagctg aggacacccc tggggtgaga gtgcaagccc
                                                                      960
agacctccct ggacttcctc ttccactttg ggatccccat ggaggatgga ccccaccctg
                                                                     1020
gcctctaccc cctgactcag ccagttgcag gtcttcagac ccagctgctg gtagaagtga
                                                                     1080
cagggttggg ttccagagcc aatcctgggg atcctcagcc gcatttctcc cacgtcatcc
                                                                     1140
ttcgaggggt cccagagggt gccgaactag gccaggtgcc cttggagccc qtqqqacctc
                                                                     1200
eggagegagg tetectegea geetegetgt egeecaeget getgtecaec ectaqaecet
                                                                     1260
tetecetgga getgattgge caggaegeag eggggeggeg cetgeacagg getgeecete
                                                                    1320
agcctagcac tgtagtccct gtccttctgg agcttagtgg cccctcgggt ttcttggccc
                                                                     1380
cgggcagcaa agtcccgctc agtctccgca tcgccagctt ctcgggccct caggatcttg
                                                                     1440
accttaggac tttcgtcaac cccagcttct ccctcacctc caacctctcc agggctcacc
                                                                     1500
tggaactgaa tgagtcggcc tggggccgcc tgtggctgga ggtcccagat tcagcggccc
                                                                     1560
eggatteegt ggtgatggtg actgtgactg cagggggacg agaagccaac ccaqtacccc
                                                                     1620
cgactcatgc tttcctccgg ctcctggtat cggccccagc cccgcaggac cggcacacca
                                                                     1680
cccctaccgg ctcatctgac ccgatcctca ccacggccac ccctgccttt tcccccttca
                                                                     1740
cattggtgac tcaaggcagg gctgggcag ggctggctgc gggcagcccc tggtggggca
                                                                     1800
cagttggagg ggtgc
                                                                     1815
```

```
<211> 1811
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1737)...(855)
<223> similar to gi3387971 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3521

```
<400> 3521
ttttttttt tttatatata aaactgcttt attaaaaagt cagctattag gaaaacaaag
                                                                       60
cccttacaag ggttctatca aaaagtacaa attttaaata aatgcatcag aaaaatggca
                                                                      120
gccagatata ccagccacag tcacaacctc aaaggccttg tggggaagga agggagaatt
                                                                      180
agggaggagg ttccgagaac tcaaggaaga ggctgggcac agagggtctt tgggtgcctg
                                                                      240
cagagetggg teetggaget accaggeaag aaccetgett cegtttteet tteettggaa
                                                                      300
aaatgtaaag aactggcagg tgtaggaaat tttgagactg gagcagaaag gcacaaaagt
                                                                      360
catttataag gtatgattgc tcactctagt cctgaggcac atggggtgga taaatggggg
                                                                      420
atcagageca cagggteeet ggetetggte atgettgeee etggetggta ceatetetga
                                                                      480
gtttggccac aggttaaatt aaggtagacc aagtggactg cataatcctg gcagcccggg
                                                                      540
gtotggagoo agtotttaga toagatgtgt tgottoattg gcaaactggt gtotgoocoo
                                                                      600
caagagatee ecceaatgag gageageagg teteetgeet agecetgtee tetgagteae
                                                                      660
tgtgggtgcc caccetggac aaggaactte tgagggcagt etetgecate caggateetg
                                                                      720
agaagcccca agccccagag ccagagtttc tccgaatgac aggcagaagc acagaaagct
                                                                      780
ggcgttgaaa ccagtcccca ccagctgctg gccccacacc catggtcact gctgacacgc
                                                                      840
ctccttggtg acattaggca gtgggtaggc aaagagggag aagtccagga tatacttagg
                                                                      900
cagcacatcc tgcagcaggg cccggggggc actgcacaag tggtaatgca ggctttcggg
                                                                      960
getggetgge eggtaceagg eetggegage tggaaategg aegtgaggtg gtgeeegtae
                                                                     1020
ccactccage acctgatttg catcageete cageetetea taggageeea caaagteata
                                                                     1080
gtgcacggca caaggctggc acaggtggta cacgggcatc caatgctcat tcatgcgctc
                                                                     1140
agggtcctca tccaccaggt atctcaggaa ctcggggaat gtgacatcgt cgcctgcagg
                                                                     1200
gctgggcccc gctccagccc tgtaccgcct cactatctca gccccatagc gttgctggta
                                                                     1260
ctctcggatc tcgccaaact tgttgcggta ggcagagagg aggcgttcca agggctcccg
                                                                     1320
cacaaacagg aacttaaagt agtgctgcag gcggtagcga atctcctcag gccgcaggtc
                                                                     1380
ggccaggaac accaggtcac tgcggtggtc catcttgagg cggacgtcca cgctgtccag
                                                                     1440
gacgcctgcc agcaccttca tcacccgctt ccagttagag caggccacct tggggacgta
                                                                     1500
gcagtagagg aagcggtaac ggtcacttac gaggatgtgg cgcagcaggg tgcgccgctg
                                                                     1560
ccccaccggc aagtcccagg ggtcccgggg catgcctggc tgtccgcaca ccgcccgcag
                                                                     1620
ggtcctgttc cggacgtcct gccgcacttg caagtccgcg tccccagccc tgagggacag
                                                                     1680
gececeagge ttgggggett teeegegeea ggetgtgeee tegeggeegg gegggtgeag
                                                                     1740
gggcaggggc ttcttctcgg ccaggatgcc ccgctcgatt atgagcagca gcccgctgga
                                                                     1800
ggccacgatc t
                                                                     1811
```

```
<210> 3522
<211> 1522
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (51)...(1377)
<223> similar to gi4580995 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3522
ccacacgcgt ccgccacgc ggccgataga tgtacatcgc gagcgggcga cctttctgtc cctcgttcgg ctgtccgcc tcctcgccca gccctactg cgcgccgtc ctctacgcgg 120
gcctgctgct actcggcctg gccgcagct ccgtgcggag caacctcacc tccttcggtg ccgaccaggt gatggatctc ggccgcagc ccacccgccg cttcttcaac tggttttact 240
```

```
ggagcatcaa cctgggtgct gtgctgtcgc tgctggtggt ggcgtttatt cagcagaaca
                                                                      300
tcagcttcct gctgggctac agcatccctg tgggctgtgt gggcctggca tttttcatct
                                                                      360
tectettige caccecegte ticateacea agececegat gggeagecaa gigteeteta
                                                                      420
tgcttaaget egeteteeaa aactgetgee eecagetgtg geaacgaeac teggeeagag
                                                                      480
accetcaate tecceeete cteeceace agagetetec ccaeccagee ecttccceee
                                                                      540
aagaggacat cgccaacttc caggtgctgg tgaagatctt gcccgtcatg gtgaccctgg
                                                                      600
tgccctactg gatggtctac ttccagatgc agtccaccta tgtcctgcag ggtcttcacc
                                                                      660
tocacatoco aaacatttto ocagocaaco oggocaacat ototgtggoo otgagagooo
                                                                      720
agggcagcag ctacacgatc ccggaagcct ggctcctcct ggccaatgtt gtggtggtgc
                                                                      780
tgattetggt eeetetgaag gaeegettga tegaeeettt aetgetgegg tgeaagetge
                                                                      840
ttccctctgc tctgcagaag atggcgctgg ggatgttctt tggttttacc tccgtcattg
                                                                      900
tggcaggagt cctgggagat ggagcgctta cactacatcc accacaacga gaccgtgtcc
                                                                      960
cagcagattg ggggaggtec tgtacaacgc ggcaccactg tccatctggt ggcagatccc
                                                                     1020
tcagtacctg ctcattggga tcagtgagat ctttgccagc atcccaggcc tggagtttgc
                                                                     1080
ctactcagag gccccgcgct ccatgcaggg cgccatcatg ggcatcttct tctgcctgtc
                                                                     1140
99999tgggc tcactgttgg gctccagcct agtggcactg ctgtccttgc ccgggggctg
                                                                     1200
gctgcactgc cccaaggact ttgggaacat caacaattgc cggatggacc tctacttctt
                                                                     1260`
cctgctggct ggcattcagg ccgtcacggc tctcctattt gtctggatcg ctggacgcta
                                                                     1320
tgagagggcg tcccagggcc cagcctccca cagccgtttc agcagggaca ggggctgaac
                                                                     1380
aggeeetatt ecageeecet tgetteacte taceggacag aeggeageag teccagetet
                                                                     1440
ggtttccttc tcgggtttat tctgttagaa tgaaatggtt cccataaata aggggcatga
                                                                     1500
gcccttcctc acgaaaaaaa aa
                                                                     1522
```

```
<210> 3523
<211> 961
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(434)
<223> similar to gi5726306 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3523
ccggcacgag ttcatggcgc tgtgcatgcg ggacttcgtg gaccactaca acggctggat
                                                                       60
ctggggtcac cagggcccgc agetgctcac gegggtcttc aagaagtggt gttccatccg
                                                                      120
cagectggee gagageegeg cetgeegegg egteaceace etgeeceetg aggeetteta
                                                                      180
ccccatcccc tggcaggact ggaagaagta ctttgaggac atcaacccgg aggagctgcc
                                                                      240
gcggctgctc agtgccacct atgctgtcca cgtgtggaac aagaagagcc agggcacgcg
                                                                      300
gttcgaggcc acatccaggg cactgctggc ccagctgcat gcccgctact gccccacgac
                                                                      360
gcacgaggcc atgaaaatgt acttgtgagg ggcccgccag gtcacctccc caacctgctc
                                                                      420
ctgatggggc actgggccgc ccttcccggg gaggcaagat tgagggcccg ggagagggag
                                                                      480
geoegagetg ceaceggget taggeagget gttgaggage tgtgggagea ggeoeagtgg
                                                                      540
gaggetgtgg acaccecgag gacagtgtee tgtetegagg cagggetgae acatggtgee
                                                                      600
atagccagcg gagggcgctc agtgagtgcc ccgggccttc tagacaacag gcaggaagga
                                                                      660
tgaacctcag ggcaccccca ggtggtgcgg aaagccaggc agttgggaca gaggtgccca
                                                                      720
cgagggcaga ggccggtgct aaggggatgg ggaagaaggg acaagattcc cagagaggag
                                                                      780
aggaggetgt tggtaggaaa gtggeaggge tgggggagae ceageeteea aggteeggg
                                                                      840
cggatgatgc tetgttettt tetggttttg gtteetettt eetggggggt ggaggaggte
                                                                      900
```

```
<210> 3524
<211> 1944
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (732)
<223> similar to gil644455 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3524
ecectectec ecetectete ectaateaag tacceettee tectecacea ectectgeee
                                                                     60
caccectece tgeatetgga ttetttttgg catceatgte agaagacaat egecetttaa
                                                                    120
ctggacttgc agctgcaatt gccggagcaa aacttaggaa agtgtcacgg atggaggata
                                                                    180
ectettteee aagtggaggg aatgetattg gtgtgaacte egecteatet aaaacagata
                                                                    240
caggccgtgg aaatggaccc cttcctttag ggggtagtgg tttaatggag gaaatgagtg
                                                                    300
ccctgcttgg gccaggagga gaagaattgc tgaaaaggga tcaacattag aaacagaaca
                                                                    360
aaaagaggac acaggtgaag attcagagcc tgtaacttct aaggcctctt caacaagtac
                                                                    420
acctgaacca acaagaaaac cttgggaaag aacaaataca atgaatggca qcaaqtcacc
                                                                    480
tgttatctcc agacgggatt ctccaaggaa aaatcagatt gtttttgaca acaggtccta
                                                                    540
tgattcatta cacagaccaa aatccacacc cgttatcaca gcccagtgcc aatggagtcc
                                                                    600
agacggaagg acttgactat gacaggctga agcaggacat tttagatgaa atgagaaaag
                                                                    660
aattaacaaa gctaaaagaa gagctcattg atgcaatcag gcaggaactg agcaagtcaa
                                                                    720
atactgcata gagggaccag actaaggaga gataggactt taatctggag gaaaaatatc
                                                                    780
ctacaaacaa caactgttca caacagcaaa cccctacatt tatgagctgt aaqaaqaaaa
                                                                    840
tggagacaaa cagaaggagg gaaaaaccaa cctactctga aagccttcag acattatgac
                                                                    900
tetggtgata agetetttee eteteegttt getgettttt tetggeettt acaacagaat
                                                                    960
ggaagagaat catttaagag ttcctgtaac agttatgcag aaaatactaa aacccatcag
                                                                   1020
gcaagatcac cacgcattga aatattttca tatcaagata aagtcgcaca ttttccacaa
                                                                   1080
tacattgcta aaataaagag gagaaaggct taggaagttt ttttgcagag agtgctggta
                                                                   1140
aagaattgag caagtttgct attgtattgt aatgtttctc tcaggtttgt tcttcctatc
atgtttgata ttccatgaat aattgagatc agccctatgt aagttaagat cataatatgt 🕙
                                                                   1260
ggaacaaatg gaattgtaag tgctttcaaa gggtaatatt tataagaaag tgtccgaaaa
                                                                   1320
atgtttcttc agcttgagaa attttagaat gataggaagt ttctcgagtt agccttcatg
                                                                   1380
caattttgta gattaaaaca taaaatttgt ccagaactta aagatttaga tgccttccta
                                                                 1440
aattgttaca atgctttacc aaatctatga cttctacata acacaaacca gtggtcaaat
                                                                   1500
gtaaacacta tattgtagat ttactgtagg ttttcaacct tttttagatt tatgcatgtg
                                                                   1560
gacattttta taatgtaatt acaatcacca caaggttagc ttttttaatt gcagacagta
                                                                   1620
atgcatgtca cactaatatg tagtggcctt ttcaaggcct agtcccaggg aaaacatttt
                                                                   1680
1740
gcactatctt tttctcagtt acctgcatga ataaataatg agaaatattt tgtgacttta
                                                                   1800
attggtaaat atgttacaaa accaagtact taatctttta catcatgtct tcagctattt
                                                                   1860
gtattttaac cagtaatttc aatggtctga aacatgattc tgagcttcac ataatatctt
                                                                   1920
aactgtggaa ctcaaaagtt tgat
                                                                   1944
```

```
<210> 3525
<211> 3671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3638)
<223> similar to gi3928000 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3525
atggateege eggegggage egetegeege etgetetgee eegegetget getgetgetg
                                                                       60
ctgctgctgc cgccgccgct cctgccgccg ccgccgccgc ccgcgaacgc caggctcgcc
                                                                      120
gccgccgccg acccccagg cgggcccctg gggcacggag cggagcgcat cctggcggtg
                                                                      180
cccgtgcgca ctgacgccca gggccgcttg gtgtcccacg tggtgtcggc agctacgtcc
                                                                      240
agagcagggg tacgagcccg cagggccgcc ccggtccgga ccccgagctt ccccggaggc
                                                                      300
aacgaggagg agcctggcag tcacctcttc tacaatgtca cggtctttgg ccgagacctg
                                                                      360
cacctgegge tgeggeceaa egecegeete gtggegeeeg gggecaetat ggagtggeag
                                                                      420
ggcgagaagg gcaccacccg cgtggagccc ctgctcggga gctgtctcta cgtcggagac
                                                                      480
gtggccggcc tagccgaagc ctcctctgtg gcgctcagca actgcgatgg gctggctggt
                                                                      540
ctgatccgga tggaggagga ggagttette atcgaaccet tggagaaggg getggeggeg
                                                                      600
caggaggctg agcaaggccg tgtgcatgtg gtgtatcgcc ggccacccac gtcccctcct
                                                                      660
ctcggggggc cacaggccct ggacacaggg gcctccctgg acagcctgga cagcctcagc
                                                                      720
egegeeetgg gegteetaga ggageaegee aacagetega ggeggaggge acgeaggeat
                                                                      780
gctgcagacg atgactacaa catcgaggtc ctgctgggcg tggatgactc tgtggtgcag
                                                                      840
ttccacggga aggagcacgt acagaagtac ctgctgacac tcatgaacat tgtcaatgaa
                                                                      900
atctaccatg acgagtectt gggtgcccac atcaacgtgg teetggtgcg gatcatecte
                                                                      960
ctgagetatg gaaagteeat gageeteate gagateggga acceetetea gageetggag
                                                                     1020
aatgtetgee getgggeeta eeteeageag aageeagaea egggeeaega tgaataeeae
                                                                     1080
gatcacgcca tettecteae aeggeaggae tttgggeett eeggeatgea aggetatget
                                                                     1140
cetgteaceg geatgtgeea teeggteege agetgeacee tgaaceatga ggaeggette
                                                                     1200
tectcagegt ttgtggtgge ccatgagact ggccaegtge tgggcatgga gcaegaeggg
                                                                     1260
cagggcaacc gctgtggcga cgaggtgcgg ctgggcagca tcatggcgcc cctggtgcag
                                                                     1320
geogeettee accgetteea etggteeege tgeageeage aggagetgag eegetacetg
                                                                     1380
cactectatg actgeetget ggatgaceee ttegeecaeg actggeegge getgeeceag
                                                                     1440
ctcccgggac tgcactactc catgaacgag caatgccgct ttgacttcgg cctgggctac
                                                                     1500
atgatgtgca cggcgttccg gacctttgac ccctgcaagc agctgtggtg cagccatcct
                                                                     1560
gacaacccct acttttgcaa gaccaagaag gggcccccct tggacgggac tatgtgtgca
                                                                     1620
cctggcaagc attgttttaa aggacactgc atctggctga cacctgacat cctcaaacgg
                                                                     1680
gacggcaget ggggcgcttg gagtccgttt ggctcctgct cacgtacctg tggcacgggc
                                                                     1740
gtgaagttca ggacccgcca gtgtgacaac ccacacccgg ccaacggggg ccgcacctgc
                                                                     1800
tegggeettg cetacgaett ceagetetge ageegeeagg aetgeeega etecetgget
                                                                     1860
gactteegeg aggageagtg eegecagtgg gacetgtact tegageaegg egacgeecag
                                                                     1920
caccactggc tgccccacga gcaccgggat gccaaggaga gatgccacct gtactgcgag
                                                                     1980
tccagggaga ccggggaggt ggtgtccatg aagcgcatgg tgcatgatgg gacgcgctgc
                                                                     2040
tectacaagg acgeetteag cetetgtgtg egeggggaet geaggaaggt gggetgtgae
                                                                     2100
ggtgtgatcg gctccagcaa gcaggaagac aagtgtggcg tgtgcggagg ggacaacagc
                                                                     2160
cactgcaaag tggtcaaggg cacgttcaca cggtcaccca agaagcatgg ttacatcaag
                                                                     2220
atgtttgaga tccctgcagg agccagacac ctgctcattc aggaggtaga cgccaccagc
                                                                     2280
caccatctgg ccgtcaagaa cctggagaca ggcaagttca tcttaaatga agagaatgac
                                                                     2340
```

```
gtggatgcca gttccaaaac cttcattgcc atgggcgtgg agtgggagta cagagacgag
                                                                     2400
gacggccggg agacgctgca gaccatgggc cccctccacg gcaccatcac cgttctggtc
                                                                     2460
atcccggtgg gagacacccg ggtctcactg acgtacaaat acatgatcca tgaggactca
                                                                     2520
ctgaatgtcg atgacaacaa cgtcctggaa gaggactctg tggtctacga gtgggccctg
                                                                     2580
aagaagtggt ctccgtgctc caagccctgt ggcggagggt cccagttcac caagtatggc
                                                                     2640
tgccgccgga ggctggacca caagatggta caccgtggct tctgtgccgc cctctcgaag
                                                                     2700
eccaaageca teegeagage gtgeaaceca caggaatget eccagecagt gtgggteaca
                                                                     2760
ggcgaatggg agccatgtag ccagacctgt gggcggacag gcatgcaggt gcgctccgtg
                                                                     2820
cgctgcattc agccgctaca cgacaacacc acccgctccg tgcacgccaa gcactgcaat
                                                                     2880
gacgcccggc ccgagagccg ccgggcctgc agccgcgagc tctgccctgg tcgttggcga
                                                                     2940
gccgggccct ggtcccagtg ctcagtaacc tgtggcaacg gcacccagga gcggccagtg
                                                                     3000.
ctctgccgca ccgcggacga cagcttcggc atctgccagg aggagcgtcc tgagacagcg
                                                                     3060
aggacetgea ggettggeee etgteeeega aacateteag ateceteeaa gaagagetae
                                                                     3120
gtagttcagt ggctgtcccg cccggacccc gactcgccca tccggaagat ctcgtcaaag
                                                                     3180
ggccactgcc agaggcgaca agtcaatatt ctgtaggatg gaagtcttgt cacgctattg
                                                                     3240
ctccatccaa ggctacaaaa gcgttgttgc aaaagtcctg taacctgtac aacaacccca
                                                                     3300
ccaacgtgga gggcaggata gagccaccgc ctgggaagca caacgacatt gacgtgttca
                                                                     3360
tgcctaccet cccagtgccc actgtagcca tggaggtgcg gccatcacca agcacccccc
                                                                     3420
tggaggtccc tctcaatgcc tccagcacca atgccacaga ggatcaccca gaaaccaatg
                                                                     3480
cegtagatga accetacaaa atecatggee tggaagatga agtecageea eecaacetaa
                                                                     3540
tecetegaeg acegageece tatgaaaaga ecagaaacea aagaateeaa gageteattg
                                                                     3600
atgagatgcg gaagaaagag atgctcggaa agttctaata aaatggaaag atagcatccc
                                                                     3660
taaaaaaaaa a
                                                                     3671
```

```
<210> 3526
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1298)...(158)
<223> similar to gi311626 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3526
ttttttttt ttaaaaatga tctcttctcc tttattgcca cattcacata aaacgttttg
                                                                       60
atatatttgg gttggtaaaa gctaaagaaa attgaagtta aaatatatat ggttttagtg
                                                                      120
ttccgaaaag cagttacaga ttgcttcctt ggtttaatta tcgaagcggt cgaaattctg
                                                                      180
ggtttgaaac tettggaagt eetcagggat ggtgteattg cagegatact tgaggttgga
                                                                      240
ccagatgatg ttttcttgag agaagcagaa aacgccaagt cggcctccac gcattgtggt
                                                                      300
gtctatggtg acgccagagt cagccaccaa ctcagagcct tcataaaatc gtaccctgat
                                                                      360
gtagcccacc tggggcctgt gctgtaggaa ccagcggtag gacaccttgt ccttccagcc
                                                                      420
cacattectg gagtecttee acageageet gacetggtea etggtgteec eegtgtgcea
                                                                      480
cagggagttc cggagatgct cccctggacc tgtcttagac ttcacagcct tgagctgaat
                                                                      540
gecaggitet geaactgete ggaatggggt ggettgecaa tatgtetget eegtetgett
                                                                      600
ccacatgacc acgtagaagc tggagctatc ttggtagcca aagataaagc ctgcatagtc
                                                                      660
atcatctgtc tgggtattca catggaaggt cccttcgaag tcaactccat taaaaagctg
                                                                      720
tgtaccccac tgccaggcca ggatcactgt tcatggtctg tacaatctcc atgccctggt
                                                                      780
tcaggaccac ccagttggga tcgatctggg catccccttc aggatccagg accacggtct
                                                                      840
```

```
ggtaagccct gaagteggte agggtgacct ctgcgttctc tgggcagacg tegateegat
                                                                      900
egatgacetg gteetggtea aagteagaet cacagatgte teecacteeg tegetgttge
                                                                      960
tatectectg ggetgggttg gggaccagec ggeagttgte tggtecaggg ggeaccaggt
                                                                     1020
                                                                     1080
etgggatace ateattgtea teateateat cacactegte accaatteea teettategg
tgtccagctg ggcactgtta atgacggtgg ggcagttgtc tgtgctgtcc tggtgcccat
                                                                     1140
etceateact gteetgattg gtgteacagg agteeceaac cagateatta tecacateag
                                                                     1200
actggttagg gttgctgaca tcaggacaac tgtcacaggc atcccccaca ccatcaccat
                                                                     1260
ccttgtcccg ttggtcacga ttgggaaatt ttgggcagta cgaaat
                                                                     1306
```

```
<210> 3527
<211> 5940
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5824)
<223> similar to gi4808815 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3527
atgagttccg actctgagat ggccattttt ggggaggctg ctcctttcct ccgaaagtct
                                                                       60
gaaagggagc gaattgaagc ccagaacaag ccttttgatg ccaagacatc agtctttgtg
                                                                      120
gtggacccta aggagtcctt tgtgaaagca acagtgcaga gcagggaagg ggggaaggtg
                                                                      180
acagetaaga cegaagetgg agetaetgta acagtgaaag atgaecaagt etteeceatg
                                                                      240
aaccetecca aatatgacaa gategaggae atggeeatga tgaeteatet acaegageet
                                                                      300
gctgtgctgt acaacctcaa agagcgctac gcagcctgga tgatctacac ctactcaggc
                                                                      360
ttgttctgtg tcactgtcaa cccctacaag tggttgccag tgtataatgc agaagtggtg
                                                                      420
acageetace gaggeaaaaa gegeeaggaa geeecaceec acatettete catetetgae
                                                                      480
aatgcctatc agttcatgct gactgatcgg gagaatcagt ctatcttgat caccggagaa
                                                                      540
tetggegeag ggaagactgt gaacaccaag cgtgtcatcc agtactttgc aacaattgca
                                                                      600
gttactgggg agaagaagaa ggaagaagtt acttctggca aaatgcaggg gactctggaa
                                                                      660
gatcaaatca tcagtgccaa ccccctactg gaggcctttg gcaacgccaa gaccgtgagg
                                                                      720
aatgacaact cetetegett tggtaaatte atcaggatee aetteggtae cacagggaaa
                                                                      780
ctggcttctg ctgatattga aacatatctt ctggagaagt ctagagttac tttccagcta
                                                                      840
aaggotgaaa gaagotatoa tattttttat cagatoatgt otaacaagaa gocagatota
                                                                      900
attgaaatgc teetgateac caecaaceea taegattatg cettegteag teaaggggag
                                                                      960
atcacagtgc ccagcattga tgaccaagaa gagttgatgg ctacagatag tgccattgaa
                                                                     1020
attotgggot toacttoaga tgaaagagtg tocatotata agotoacagg ggotgtgatg
                                                                     1080
cattatggga acatgaaatt caagcaaaag cagcgtgagg agcaagctga gccagatggc
                                                                     1140
acagaagteg etgacaagge ageetatete cagagtetga actetgeaga eetaeteaaa
                                                                     1200
gccctctgct accctagggt caagggtggc aatgagtatg tcaccaaagg ccagactgtg
                                                                     1260
cagcaggtgt acaatgcggt gggtgctctg gccaaagccg tctacgagaa gatgttcctg
                                                                     1320
tggatggtca cccgcatcaa ccagcagctg gacaccaagc agcccaggca gtacttcatc
                                                                     1380
ggggtcttgg acattgctgg ctttgagatc tttgatttca acagcctgga gcagctgtgc
                                                                     1440
atcaacttca ccaatgagaa actgcaacag tttttcaacc accacatgtt cgtgctggag
                                                                     1500
caggaggagt acaagaagga aggcattgag tggacgttca ttgactttgg gatggacctg
                                                                     1560
getgeetgea teegagetea tegagaaage etatgggeat ettetteeat eetggaagag
                                                                     1620
gagtgcatgt tccccaaggc gacagacacc tccttcaaga acaagctgta tgaacaacat
                                                                     1680
cttggaaaat ccaataactt ccagaagccc aagcctgcca aaggcaagcc tgaggcccac
                                                                     1740
```

```
ttctctttga ttcactatgc tggcaccgtg gactacaaca ttgccggctg qcttgacaag
                                                                     1800
aacaaggacc ccctgaatga gactgtggtg gggctgtacc agaagtctgc aatgaagact
                                                                     1860
ctggctctcc tctttgttgg ggcaacggga gcggaagcag aggctggcgg tggaaagaaa
                                                                     1920
ggtggtaaga agaagggttc ttctttccag actgtgtcgg ctctcttcag ggagaatttg
                                                                     1980
aataagetga tgaccaactt gaggagcact cacceceact ttgtgeggtg catcateece
                                                                     2040
aatgaaacta aaacteetgg tgeeatggag catgagettg teetgeatea getgaggtgt
                                                                     2100
aacggtgtgc tggaaggcat ccgcatctgc aggaaaggct tcccaagcag aatcctttat
                                                                     2160
gcagacttca aacagagata caaggtgtta aatgcaagtg ctatccctga aggacaattc
                                                                     2220
atcgatagca agaaggette agagaagete etggggteea ttgacattga ceacacceag
                                                                     2280
tataaatttg gtcacaccaa ggtctttttc aaagctggtc ttctggggct cctagaggag
                                                                     2340
atgegagatg agaagetgge ceagetgatt accegaacee aggeeatgtg cagagggtte
                                                                     2400
ttggcaagag tggagtacca gaaaatggtg gaaagaagag agtccatctt ctgcatccag
                                                                     2460
tacaatgtcc gtgccttcat gaatgtgaag cactggccct ggatgaagct gtatttcaag
                                                                     2520
atcaaacccc tcctcaaaag tgcagagaca gagaaggaga tggccaacat gaaggaagaa
                                                                     2580
tttgagaaaa ccaaagaaga gctggctaag accgaggcaa aaaggaaaga gctggaagaa
                                                                     2640
aaaatggtta ctctgatgca agaaaaaaat gacttgcaac tccaggttca agctgaagct
                                                                     2700
gacagettgg etgatgeaga ggaaaggtgt gaceagetaa teaaaaceaa aateeageta
                                                                     2760
gaagccaaaa tcaaagaggt gactgagaga gctgaggatg aggaagagat caatgctgag
                                                                     2820
ctgacagcca agaagaggaa actggaggat gaatgttcag aactcaagaa agacattgat
                                                                     2880
gaccttgagc tgacactggc caaggttgag aaggagaaac atgccacaga aaacaaggtg
                                                                     2940
aaaaaacctca cagaagagat ggcgggtctg gatgaaacca ttgctaagct gaccaaggag
                                                                     3000
aagaaggete tecaggagge ceaceageag accetggatg acctgeagge agaggaggae
                                                                     3060
aaagtcaaca ccctgaccaa agctaaaatc aaacttgaac aacaagtgga tgatcttgaa
                                                                     3120
ggatctttgg aacaagaaaa gaaaatccgg atggatctag aaagagcaaa gagaaaacta
                                                                     3180
gagggagacc taaaattggc tcaagaatcc acaatggata tagaaaatga caaacaac
                                                                     3240
cttgatgaaa agcttaaaaa gaaagagttt gaaatgagcg gtctgcaaag caagattgaa
                                                                     3300
gatgaacaag cccttggtat gcagctgcag aagaaaatca aggagttaca agcccgcatt
                                                                     3360
gaggagetgg aggaggaaat cgaggeagag eggaceteee gggeeaaage agagaagetg
                                                                     3420
cgctctgatc tctcccggga gctggaggag atcagtgaga ggctggaaga agccgtgggg
                                                                     3480
gccacctcga cccagattga gatgaacaag aagcgggaag ctgagttcca gaaaatgcgc
                                                                     3540
agggacctgg aggaggccac cctacagcat gaggccacgg cggccaccct gaggaagaag
                                                                     3600
catgcagata gtgtggccga gcttggggag cagattgaca acctgcagcg agtgaagcag
                                                                     3660
aagctggaga aggagaagag tgagatgaag atggagatcg atgaccttgc taqtaacatq
                                                                     3720
gagactgtet ccaaagecaa gggaaaeett gaaaagatgt geegegetet agaagateaa
                                                                     3780
ctgagtgaaa ttaagaccaa ggaagaggag cagcagcggc tgatcaatga cctcacagca,
                                                                     3840
cagagagege geetgeaaac agaateaggt gaatatteac geeagetaga tgaaaaggae
                                                                     3900
acactagttt cacagetete gaggggcaaa caageettta cacaacagat tgaggaactg
                                                                     3960
aaaaggcaac ttgaagagga gataaaggcc aagagtgccc tggcacatgc cctgcagtcc
                                                                     4020
tecegecatg actgtgaeet getgegggaa eagtatgagg aggageagga agecaaggee
                                                                     4080
gagctacaga gagcaatgtc caaggccaac agtgaggttg cccagtggag gaccaaatat
                                                                     4140
gagacagatg ccatccagcg cacagaggag ctggaggagg ccaagaagaa gctggctcag
                                                                     4200
cgtctgcagg atgctgagga acatgtagaa gctgtgaatg ccaaatgtgc ttcccttgag
                                                                     4260
aagacgacag aaggggctcc agaatgaagt tgaggacctc atgattgatg gtgagaggac
                                                                     4320
aaatgctgcc tgtgccgccc tggacaaaaa gcaaaggaac tttgataaga tcctggcaga
                                                                     4380
atggaaacag aagtgtgaag aaactcatgc tgaacttgaa gcttctcaaa aggaatcccg
                                                                     4440
ctcactcagc acagaactat ttaagattaa gaatgcttat gaggaatctt tagaccaact
                                                                     4500
tgaaaccttg aaacgggaaa ataagaattt gcaacaggag atttctgatc tcactgaaca
                                                                     4560
gattgcagaa ggaggaaagc gcatccatga actggaaaaa ataaagaagc aagttgagca
                                                                     4620
agaaaagtct gaacttcagg cctgccttag aggaggcaga ggcatcctct tgaacatgaa
                                                                     4680
gagggaaaga teetgegeat eeagettgag ttgaaccaag teaagtetga ggttgatagg
                                                                     4740
aaaattgctg aaaaagatga ggaaattgac cagatgaaga gaaaccacat tagaatcgtg
                                                                     4800
gagtccatgc agagcacact ggatgctgag atcaggagca ggaatgatgc cattaggctc
                                                                     4860
aagaagaaga tggagggaga cctcaatgaa atggaaatcc agctgaacca tgccaaccgc
                                                                     4920
atggctgctg aggccctgag gaactatagg aacacccaag ccatcctcaa ggatacccag
                                                                     4980
ctccacctgg atgatgctct ccggagccag gaggacctga aggaacagct ggctatggtg
                                                                     5040
gagegeagag ceaacetget geaggetgag ategaggage tgegggeeae tetggaacag
                                                                     5100
acagagagga gcaggaaaat cgcagaacag gagctcctgg atgccagtga gcgtgttcag
                                                                     5160
```

```
ctcctgcaca cccagaacac cagcctgatc aacaccaaga agaagctgga gacagacatt
                                                               5220
teccaaatee agggagagat ggaagacate atecaggaag eeegcaatge agaagagaag
                                                                5280
gccaagaagg ccatcactga tgctgccatg atggctgagg agctgaagaa qqaacaqqac
                                                                5340
accagegeee atetggageg gatgaagaag aacetggaac agaeggtgaa ggaeetgeag
                                                                5400
catcgtctgg atgaggctga gcagctggcc ctgaagggtg ggaagaagca gatccagaaa
                                                                5460
ctggaggcca gggttcgtga acttgaaggt gaagttgaaa gtgaacagaa gcgcaatgtt
                                                                5520
gaagetgtea agggtetacg caaacatgag agaaaagtga aggaacteac ttaccaaact
                                                               5580
gaggaagacc gcaagaatat tctcaggctc caggacctgg tggacaaact gcaagcaaag
                                                               5640
gtgaaateet acaagagaca agetgaagaa geggaggaac aateeaaegt caacetetee
                                                                5700
aaattccgca ggatccagca cgagctggag gaggccgagg aacgggctga cattgctgag
                                                               5760
tcccaggtca acaagctgag ggtgaagagc agggaggttc acacaaaaat cataagtgaa
                                                               5820
gagtaattta totaactgot gaaaggtgac caaagaaatg cacaaaatgt gaaaatottt
                                                               5880
5940
```

```
<210> 3528
<211> 499
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (190)...(313)
<223> similar to gi1335864 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3528
cagcagetga tetgteaace eeggeeagag eegageegee tgaggeetge agtqttetee
                                                                       60
atcaccactg tgatggcatc cgcttccgtg actgtcactg tgcaccctcc gcctgtcctg
                                                                      120
ggcccacgca ggacccccaa gcggggctct gcacaggcca ggagggctac ccagggactg
                                                                      180
accacgggtt gttcatgggt cctcacctgc ttttccaggt ccagggtgag aggacgaatt
                                                                      240
tgaaggtaga agtcacagag ttgcaggatg tggagtgcga ggagtggccc cggggaagca
                                                                      300
gctccaactg agggtgatta aaatctgaag caggccgggc gcagtggctc acatctgtaa
                                                                      360
teccageact tttggaggee gaggeaggtg gateacetga egteaggagt tegagaceag
                                                                      420
cctgggcaac atggtgaaac cccgtctctg ctaaaaatac aaagttagcc aggcatggtg
                                                                      480
gcgagcgcct gtaatccca
                                                                      499
```

```
<210> 3529
<211> 4655
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4574)
<223> similar to gi2224667 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

3120

```
agcaggaagg aggcctgaag ccactggcac aggaacatgg acccaggtca gcacttggag
                                                                     3180
gtgcaaggga ggtccccgat gcgcctcctg ctgcctgccc tgaggtcagc caggcccggc
                                                                     3240
tectgagece agecagggag gaaagaggee tgagtggeaa gtecaceceg gageceaege
                                                                     3300
ttccctcage tgtggccaca gaggccagte tggactcctg cccagagtet tcagtagggg
                                                                     3360
ctgtgtccag tctggacaga ggctgccctg acgcgcctgc ccccacgtct gcaccaacct
                                                                     3420
cccagcagcc ggagcctgta ctgggtctgg gcagtgttga gcaaccccac gaagtaccca
                                                                     3480
gtgtccttgg cacccccttg ctgcagcccc cagaaaacct tgccaagggt cagcccagca
                                                                     3540
cgcccgtgga caggcccctg ggccctgacc cttctgctcc tggtaccctt gctggggcag
                                                                     3600
ecetaceece actggageec ecageeceet geetgtgeea ggaeeceeag gaagaetetg
                                                                     3660 ·
tggaagacga ggagcccca ggctctctgg gcctcccacc gccccaggca ggagtccagc
                                                                     3720
ctgccgctgc tgctgtctca ggaaccacac agcctctggg gactgggccg cgagtcagcc
                                                                     3780
tctcgcctca ctccccactc ctcagcccca aggtggcctc catggatgcc aaagacctgg
                                                                     3840
cettgeagat ettgeegeet tgeeaagtge etceteete tgggeeceag ageecagetg
                                                                     3900
gccctcaagg gctctcagcc cccgagcagc aagaggatga ggacagcctg gaggaagact
                                                                     3960
egecteggge cetgggeteg ggccagcatt eggatageca eggggagtea teageegage
                                                                     4020
tggacgagca ggacatettg geteeteaga eegtgeagtg tecageeeag geeceageag
                                                                     4080
gcggcagtga ggagaccatc gccaaagcca agcagagtcg cagtgagaag aaggcccgaa
                                                                     4140
aggcaatgtc aaagctgggc ttgcggcaga ttcagggagt caccaggatc accatccaga
                                                                     4200
agtccaagaa catcctcttt gtcatcgcca agcctgatgt cttcaagagc ccagcctcag
                                                                     4260
acacttatgt ggtctttggc gaggccaaga ttgaggacct gtcccagcaa gtgcacaaag
                                                                     4320
ccgcagctga gaagtttaag gtgccctcag agccctcagc cttggtccct gagtcagcac
                                                                     4380
ccaggccccg ggtgaggctg gagtgcaagg aagaggaaga ggaggaggag gaagaggtgg
                                                                     4440
acgaggcggg gctggaactg cgtgacattg agctggtgat ggcgcaggcc aatgtgtcca
                                                                     4500
gggccaaggc cgtgcgggct ctgagagaca accacagtga catcgtcaac gccatcatgg
                                                                     4560
aactgaccat gtagccactg accggaaget ggagccatec tacgcettee etcagetetg
                                                                     4620
ctactcaata aatcggtgtc ccttcaaaaa aaaaa
                                                                     4655
```

```
<210> 3530
<211> 4455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2947)
<223> similar to gi505100 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3530
agatggetge egacagtgag ecegaateeg aggtatttga gateaeggae tteaecaetg
                                                                       60
cctcggaatg ggaaaggttt atttccaaag ttgaagaagt cttgaatgac tggaaactga
                                                                      120
ttggaaactc tttgggaaag ccactcgaaa agggtatatt tacttctggc acatgggaag
                                                                      180
agaaatcaga tgaaatttcc tttgctgact tcaagttctc agtcactcat cattatcttg
                                                                      240
tacaagagtc cactgataaa gaaggaaagg atgagttatt agaggatgtt gttccacaat
                                                                      300
ctatgcaaga tttgctgggt atgaataatg actttcctcc aagagcacat tgcctggtaa
                                                                      360
gatggtatgg gctacgtgag ttcgtggtga ttgcccctgc tgcacacagt gacgctgttc
                                                                      420
tcagegaate taagtgcaae ettettetga gttetgttte tattgeettg ggaaacaetg
                                                                      480
gctgtcaggt gccactcttt gtgcaaattc accacaaatg gcgaagaatg tatgtaggag
                                                                      540
aatgtcaagg teetggtgta egaactgatt tegaaatggt teatettaga aaagtgecaa
                                                                      600
atcagtacac tcacttatca ggtctgctgg atatcttcaa atcaaagatt ggatgtcctt
                                                                      660
```

```
taactccatt geetecagtt agtattgeta ttegatttae etatgtaett caagattgge
                                                                      720
agcagtattt ttggcctcag caacctccag acatagatgc ccttgtagga ggagaagttg
                                                                      780
gaggettgga gtttggcaag ttaccatttg gtgcctgcga agatectatt agtgaactec
                                                                      840
atttagetae tacatggeae teatetgaee gaagggatea ttgtggataa tgatgtttat
                                                                      900
tctgatttgg atcctattca agctccacat tggtctgtta gagttcgaaa agctgagaat
                                                                      960
cctcagtgtt tgctaggtga ttttgtcact gaatttttta aaatttgccg tcgaaaggag
                                                                     1020
tcaactgatg agattettgg acgatetgca tttgaggaag aaggcaaaga aactgetgat
                                                                     1080
ataactcatg ctttgtcaaa attgacagag ccggcatcag ttccaattca taaattatca
                                                                     1140
gtttcaaata tggtacacac tgcaaagaag aaaatccgaa aacacagagg tgtagaggag
                                                                     1200
teacegetaa ataatgatgt tettaataet atteteetgt tettatteee tgatgetgtt
                                                                     1260
tctgagaaac cattagatgg aactacttca acagataata ataatcctcc atcagagagt
                                                                     1320
gaagactata atctctacaa tcagttcaag tctgcaccat ctgacagttt aacatacaaa
                                                                     1380
ctggctttgt gtctctgtat gatcaatttt taccatggag ggttgaaagg agtggcacac
                                                                     1440
ctctggcagg aatttgttct tgaaatgcgt ttccgatggg aaaacaactt tctgattcca
                                                                     1500
ggattagcaa gtggaccccc agatctgagg tgttgtttac tgcatcagaa actacagatg
                                                                     1560
ttaaattgtt gtattgaaag aaagaaggca cgtgatgagg ggaaaaagac aagtgcttca
                                                                     1620
gatgtcacta atatatec aggggatget ggaaaagcag gagaccagtt ggtgccagat
                                                                     1680
aatetaaaag aaacagataa ggaaaaggga gaggtaggaa aatettggga tteetggagt
                                                                     1740
gacagcgaag aagaattttt tgaatgccta agtgatactg aagaacttaa aggaaatgga
                                                                     1800
caagagagtg gcaagaaagg aggacctaag gagatggcaa atttaaggcc ggaaggacgg
                                                                     1860
ctctatcagc atgggaaact tacactgctg cataatggag aacctctcta cattccagta
                                                                     1920
acccaggaac cagcacctat gacagaagat ctgctagaag agcagtctga agttttagct
                                                                     1980
aaattaggta catcggcaga gggggctcac cttcgagcac gcatgcagag tgcctgtctg
                                                                     2040
ctctcagata tggagtcttt taaggcagct aatccaggtt gctccctgga agattttgtg
                                                                     2100
aggtggtatt caccccggga ttatattgaa gaggaggtga ttgatgaaaa gggcaatgtg
                                                                     2160
gtgctgaaag gagaactgag tgcccggatg aagattccaa gcaatatgtg ggtagaagcc
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tgggaaacag ctaagccaat tcctgctága aggcaaagga gactcttcga tgatacacgg
                                                                     2280
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                                                                     2340
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                                                                     2400
aacatttctt cagttaagaa gatcataaag cagataatat cccattccag taaagttttg
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cacttcccca atccagaaga caagaaattg gaagaaatca ttcaccagat tactaatgtg
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gaagetetea ttgecagage teggteacta aaagecaagt ttggaactga gaaatgtgaa
                                                                     2580
caggaggagg aaaaggaaga tottgaaagg tttgtgagtt gootgotgga goagcotgaa
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ccagaggaaa gaaggcagaa ctccgtgtca gacttcccac cccctgctgg ccgggaattc
                                                                     2820
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attcgtggtc tgtgcaaaca cttcgtggtt ctatatatca gcagcaagtg tgcaaaataa
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aggacctgtt aactcagatt tctggatatt ttggtggtag cttctagtcc cagaatctgt
                                                                     3420
gtttttaaaa tactacatga cattctgtct attcaatcac ctggtggtca tctttcttgt
                                                                     3480
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                                                                     3540
gtttctcttt ttcatgtaac tgtaacctaa atgtattact tctgataaaa ctatatatca
                                                                     3600
aatgtcactg caaattagtt ttatatctgt catgtgagat ttgtcttact tattttctt
                                                                    3660
ttggttgcca tggaagttat ggccctgaaa atcgtctccc tccccttctc ttgctgtaca
                                                                    3720
gcatgcgttc tctttttgtg gttgctggct gggtactgta tttaatgaag tagagaatag
                                                                     3780
cacttgcaaa aatacagtet tggtacctag agactgtcat gcagatagta taatttggta
                                                                    3840
tatgtgctaa tgcattgagt agaggattat tttaacacac tattttgctt ttgtatttta
                                                                    3900
gttaaaataa tcgatgggga tgtgtagccc ccccgtgtga ggatgacatc accacatttc
                                                                    3960
tagtttcatg gagctcaaga tgtcttgtgt ctgtgtggct agatggcctc tgcttggtaa
                                                                    4020
tottattttt aggodtaaaa ttoocactta aatocaaagt aaaaatggtt atactgaago
                                                                    4080
```

```
ataaaccttg cctgtgtaat tttaaaaaat taatagagct gtgcaaaccc tgttatttt 4140 gtaaaaaaaa aaaaaataca tatctatata taatatgtgt gtgtgtgtga catatgcaca 4200 cgtctctgtg tatgtgaagt aggggaggcc ctgggggatg acctcccagc ctttatgaat 4260 cttttctcta tgctgctgga cttcattctt actggtcacg cgatgcaggc ggcctgaggc 4320 cagtgctgta ccaagtagaa gacggttcct aaggacagag tttgtctgtt ttctaacaaa 4380 gaaaaaattct acaaaggagt ggttaaagtt acaaaggcat tgtgaatcta ataaaaggaa 4440 aggtgtcgct taaaa
```

```
<210> 3531
<211> 2004
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(988)
<223> similar to gi3127193 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

agtocagogg ggaattoggo otgoaagoot otgatataat gtggaccata toagacacag 60 gttggatact gatcatcttg tgctcactta tggaaccttg ggcattagga gcatgcacat 120 ttgttcatct cttgccaaag tttgacccac tggttattct aaagacactc tccagttatc 180 caatcaagag tatgatgggt gcccccattg tttaccggat gttgctacag caggatcttt 240 ccagttacaa gttcccccat ctacagaact gcctcgctgg aggggagtcc cttcttccaq 300 aaactctgga gaactggagg gcccagacag gactggacat ccgagaattc tatggccaga 360 cagaaacggg attaacttgc atggtttcca agacaatgaa aatcaaacca ggatacatgg 420 gaacggctgc ttcctgttat gatgtacaga tcatagatga taagggcaac gtcctgcccc 480 ccggcacaga aggagacatt ggcatcaggg tcaaacccat caggcctata ggcatcttct 540 ctggctatgt ggacaatccc gacaagacag cagccaacat tcgaggagac ttttggctcc 600 ttggagaccg gggaatcaaa gatgaagatg ggtatttcca gtttatggga cgggcagatg 660 atatcattaa ctccagcggg taccggattg gaccctcgga ggtagagaat gcactgatgg 720 agcaccetge tgtggttgag acggetgtga teagcagece agacceegte egaggagagg 780 tggtgaaggc atttgtgata ctggccttgc agttcctatc ccatgaccca gaacagctca 840 ccaaggaget gcagcageat gtgaagtcag tgacageece atacaagtae ccaagaaaga 900 tagagtttgt cttgaacctg cccaagactg tcacagggaa aattcaacga gcccaagctt 960 cgagacaagg agtggaagat gtccggaaaa gccccgtgcg cagtgagaca tctaagagac 1020 atteatttgg atteceetet tetttetett tetttteeet ttgggeeett ggetttgeet 1080 atggatggat atggagattc tttatgggaa gaacatgaat ataagttttg tcttgccttg 1140 gttattagca caaaacttta ccatgttaga tgttgaaaga agaaagggaa ggaatgagag 1200 agagtgaaaa ggagagggta acagaaaaaa aggaaagaaa agtaagtcag ggaaatatta 1260 aaactgcaag ggaaagcaat tgaaaaagaa ataaagtagg gaaagaagga gagaggaagc 1320 aagggaagga ggaagaaagg aaagaggaga tgaaaggggg agaaaagata gaagaaaaat 1380 aattgaaggg agaatcagaa aaataaagag aagaaaggaa agaaataaag agagaaagag 1440 aaagaagaaa gagcaaaaga acacaagaaa gaaagagagg gagaaagaga gggagaaagg 1500 gagagaaaaa aattgtaaaa ataaaaatag taaaagaaac tgataaagaa aagtaatgga 1560

1620

1680

1740

1800

agacaggaag aaaagaagag aaggaagtaa agaggaaaac ttataaatat tcccacagat

agacaaagtc aagcataaaa ctggagcttg agaaggaaat gaaaggccgt ggcaccttct

tataccctag aagaagacct ccatacagga agacttgtgt gtggggttgg gacattagaa

tcatccacaa gtcaccccaa accttggaac tgtcagggtc agaggggaac caccatttat

```
taagcatttg ccatgtgcca ggcactaacc cagatgcatt ataaatacca cgttgtttca 1860 cctgtgtgtg gcatctacag accttagatc atagctgtga gaacaacgta agcactgcca 1920 aagttatcag ctacccatat ctcatgttt tgatgttatc tactcttcct agaatcaaat 1980 attaaaataa ttttaaaaaa aaaa - 2004
```

```
<210> 3532
<211> 4490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4493)...(772)
<223> similar to gi4240307 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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```
gcgcacatga ccccgggaat gagccacaga caatggcaga cggcccagag agtcgggaat
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geteagtgee tgteggttee aaeggaaaag gageaeagea getteeaggt gteeeaggge
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acaagcccac atcagagggg tgcaagagaa atgatccacg ttgagcgggt caacctcctg
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ctctaagtcc aagettccag tctccacact ccgccactgg ctcagggtct cgatgaggcg
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ggcatagece tgggeageag ceaggtgeag aaggeteatg eeceggaagg ggetteeatg
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ggccagacgt tcaggaccct tccaggtgga gcgtgggatc atgctttcta ccaagaccac
                                                                     2340
taccogtget tegaacceag geocetggee tteateetga actggaggag cateaggace
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ctggcaaggc acctgcccag ctgctgcgat ctctgccatc cgcttctcca tctgctccag
                                                                     2460
tegetetagt atggaeatee ggaaetggtt gtegteeagt gaeageeagt caagttgagt
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actaggcaga gacaggaatc ggcgggctcg atactcaaag agcacagaag cagaaagggg
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cecetecege cetgecacet geaaagacae cageeetace teatgggegg gacagtagea
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gcgtaagaca ccaggctgga caagtgaggc tggcactgcg atgtgatcaa agacacagga
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gtaatgeteg geggettegg teeaaggace tgtgatgage acettgacee caecetetgg
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tggagcaggg atgcttggag cttcgtcact gatgagttct cccataaggt ctgggaatga
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gatgaagaag cagtttcctc ttctcccacc tgctactgac tgtggtgggg gaccccgagc
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agetgeetgg ggeteeaggg eageageagg etetagggea gaacaggggg tatgagegge
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ctetgeeteg gggaagtetg ggettaetee etgeeceeet ceatatgtet ggeecetetg
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ggggctgttg agaaaacgat cagggtcaaa ggcaggactg ggaggagctg gtggggcaga
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aggeteagtg cetacaacca etgecaaact catggaagge etaggateag eetgtggage
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caagtgeetg gtgggegtea ageeteeage eegetgetee agteetgtea ggaggaggat
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agcagtgcct cctcttgaag aaccccctcg agaagtggga gggctaggtc tgatttctag
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gggctctgca aaacctgatg aggaggaaga agaggaagaa gatggggagg tgtgtgcctt
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ggggagctct gggggaagtg gggctatcag tggaggaggc tctggggggt gagggtgggg
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gatagaggtc agggttaaag ctcggggctc cactttggga gagatgatgc ggtgtttcgt
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gctgctgcat ttgtgggtaa ggctcccaga accaagcccc ccactgcaga gacaggcgtg
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gtggteetet egggtggtet teccateett eegettette eagaggtaae cateetteeg
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cagcttettg gggagaaaga tetteaggtg gtggetgttt teagcaacet eggtggtgte
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cttggtattc atggtgaggg ctccaggggg caaggtcacc cccggcctga ggggccgggg
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ggagggggag tetgtgetee eggggteeeg egggtgaegg eggeagegge
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```

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<211> 2333
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2304)...(712)
<223> similar to gil694688 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<210> 3533

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<400> 3533
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                                                                      120
aatgtatggg ctatttgcct gattggtggc ctggactcag caagagattc ctttgcagca
                                                                      180
gaggttggcc acacatctgg gggctgcaac accactgaaa agacagcttt ctaagcatta
                                                                      240
gtgtaaggca aaaagcagag tgcctaaact tggccatttc caccaagaaa aaaagtttca
                                                                      300
tagcaacctt ccttcaccag aaaggcttac tttatgatat gctaacagaa cagaaaagca
                                                                      360
ggttgggaca agatacagac tttgttgcat ttagctatga cccttctctc ccctctgtgg
                                                                      420
                                                                      480
atgtgggcag ggtggggaga ggcaggaaga ggcagtagag ggaaatgaca tttgcactca
ggetteeege eeetaeeeae eeetaeeett egeeeagaea gaegteggat etatgetgea
                                                                      540
ccaggggtgg gtcatggagt ccagctaatt gccaggagct gaggcgtgta caagccatga
                                                                      600
aaagagetge cecaeggeet ceceacatea etgteettea tgeaettgea tetttaagge
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tgccagcttc agagctccct ggacattccc tggccaagtg tcatccctgt gtcaaatgga
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tgggatgcca ggtaatcctt gtactccccg tcaatcagtt tggcggcatt gttcctggca
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aaccagcagt ctatctgctc ttccccgttg taaatcttcc tttgcttcca gaccactggg
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acttggtggc ctttcactgt taggacggcc tcaggcccct ctcccacctg aaggagcaga
                                                                      900
gggtgagtga ggttctggct gggccctgca gggtcttctg tgagtctggc atcctgattc
                                                                      960
aggaactgac ccagcagtcc gtggcagttg ctggaaaggc cctcgctgtt ggcaatgtag
                                                                     1020
aaacccaggt ggtgtcgctg gaagggcgcc ggctttttgt agaggtggat gaggatgaca
                                                                     1080
aaggetatgg ageeetggat ggtgaeggtg acattggegt tggeagaeac ggaeacetee
                                                                     1140
agececcage tecceaceae caeaetetgg ttgeagggga geaceagtet gtecceacea
                                                                     1200
tecaagatga etetgetegg tgtgateteg agataagate tetetggett gttgatgagg
                                                                     1260
atggtgatag tgcgcaagta agtgcgctgt ttcttgtggc catttggagg ggcqggtgcc
                                                                     1320
ccaattaact ctccgttcac tgtgacacca gagtccctgt gatcagagac cagcctgagg
                                                                     1380
atgtccccgg gctgcccatc aatgttgaag cacacggtga gtctgctcag ggggaaatcc
                                                                     1440
acaacaaagt ggggatcacc atccactgat gttttagaga ttttaattct tggctggtat
                                                                     1500
ggcttcttga gcaaaggtcc tggctgcgtg ccagctcctc gcacgctctg caccaccggt
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tegggteeca tggeageega catgeegtgg geeteeteea ggeeateeat gegtgggaee
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                                                                     1680
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agcageteet ttgtggtgag gtageteeag agaegetega tgtggttggt gteeeeetet
                                                                     1800
ccategeete daggeetggg getteetgtg acatetttee etgeettetg aggeegeaca
                                                                     1860
ggcacatctg tettcaggat gatgaattte ttactgttge tggcggtgae etccacgtge
                                                                     1920
aggigatica gettectgie caccagette eeegeaatga igateteega geegitgaag
                                                                     1980
tagttgggga acagggtett ggtggeetge accaetgage tggggggata atcgatgegg
                                                                     2040
atgtcagaga ggagcggggt cctgatttca tcgtagaacc cgatgagctg cgagcctgcg
                                                                     2100
tectectect egtgeaegeg eegtgtgagg ceaeagttet eeagegaeag ttteteeage
                                                                     2160
agcctgaagt ccacgtcgtt gccgatgcca atggtgaaga tgcagacttg gcctcgggcg
                                                                     2220
geeteteggg tgttgttgag gatettgagg gtgtgegtet eeeegaeegt gggettgeet
                                                                     2280
teegteagga agacgatgag ggacaegete eggteteeeg taegegtggg ega
                                                                     2333
```

```
<210> 3534
<211> 2313
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (2311)...(1475)

<223> similar to gi4589652 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

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                                                                    120 .
cttctcctta aagaagtctg tgtctaattc ctacgcgtgg ccgttgtcag agtatagctc
                                                                    180
tttcccgtta cctttactag ccagaaacag cttgcttgct ttctgaagaa agagaaatga
                                                                    240
cgcaccacag ggtacatcag atgaatcaga aattacattg tttggacttc aaaacagtgt
                                                                    300
ttactgactc tgggcttaaa cttctagtcc actcctagaa cagaaaccct caaagttcaa
                                                                    360
gagtgttttt ttttgtacaa ttgtttatac aaattcaaca aaggtaaaat cgcatcaggg
                                                                    420
aaggtctagg aaacaccacc ttacaacaat ggcacttata aatgcagaac tttacaacta
                                                                    480
540.
aaaagcaaaa gaaaggctat gtgggagcat ttattctacq tcttqactca ctqtataaat
                                                                    600
tagatetatg taagtacaag ageteatget ggageagaae eteetgagtg caaaggetga
                                                                    660
agtegaaatt ttaaaatttg agaaaagtga attetetaca gaggaaaett ggeagagtat
                                                                    720
cttactttga ctataattta catttatcca caacatgctc atgtaactct tqaqqtacaa
                                                                    780
agcagactet caacttecag ttaaacatge ttttaagtgg aaggtettag cetaetttgt
                                                                    840
tagatctggg cacatttgta gatgggttgt gtcgatgaag tacacgttaa attctctcct
                                                                    900
accttaagga aatcaggaaa attggcaatc tcaaaacaat aaaaacactg gtatgcattc
                                                                    960
aaaccttgca taaataactt ttaaacaatt tgtacaaaaa tagttctgca taatgtaaga
                                                                   1020
tgtaacaaaa ccaaccaaac aaaaaaaagt gtcaagacgg cagcagatgt ggtgtgtggt
                                                                   1080
ccactttatg tcaacaccca aaacctcggt gttgcaagga atgaagtgtc caaaacacca
                                                                   1140
ctaccactaa cagaaactcc taagctcatg cttcagtatg agaatttctc cgaagtccac
                                                                   1200
ectectetee gacaggaatg tettettgta aaggeegeet tagaaatggt ecagaaagea
                                                                   1260
gtgcagttac gattcagaaa gaccaaagga aagtgtcggc tcactcatcc cccaaacggg
                                                                   1320
tggttgaaca getteteeet tggaaagact tgcaaaatgg aattgeqttq tqqtetqttq
                                                                   1380
teccaegtte caaatggaaa ataaaageee teatttttgt aaagtetete eeeteccaga
                                                                   1440
gcccgccccg tatttacata cttatccttg gactaactca gtttttqcaq qaqtttttct
                                                                   1500
totaacttgc ccaaactgga cactcacaga catctcggct atgaactgct cacagccttc
                                                                   1560
cttggtgact tgcttgcagt acctcaggtc aatatgacag atgtttccac agcgtttgaa
                                                                   1620
gaaggacagg cactgatcag tgaccttatt gcagtcagac aggttgatct cggttaagga
                                                                   1680
gtctcgggtg gtggtgccaa cagcagtgag caggttgata gactggtcgg tgacgtggtt
                                                                   1740
acagtaactg aggtggagct tggagagcag gggcatgtgg cggatgatga gccgcaggga
                                                                   1800
ggcatctgtg atgtccaggc ctgccaggcg cagctccacg atgttccgga gcttgctccg
                                                                   1860
attgtccatc tgacctggcc tgttgtctgt gggcggggac aggagatccc gcatctgggc
                                                                   1920
atcetttagt ccctccaccc actggacatc cagggtccgg agcagcggac aactggagct
                                                                   1980 --
gcaaagggcc gagaccgcga tecatgagca gcctgacagc accaagtccc ggagcccaqq
                                                                   2040
cageeggttg atgageeage teagetgett ettggagata ttggteeage tgaggtegag
ggagacgggc tgtcgccgga tgatgccact cagcatcagg ggtgtgatag acttgcagtg
                                                                   2160
gttcaggtca atgcgggtcc acaaccgctt atcgcagcac cagcggttcc aggtcctgca
                                                                   2220
gacccgcatg cacacacac ggtcttggtg gctgaggtag ctgaagacgg ccatccacac
                                                                   2280
ctccctgtgc atgacgtggg ctgccccatc gtc
                                                                   2313
```

<210> 3535

<211> 1319

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (251)...(734)
<223> similar to gi540535 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3535
gggcgttccc gactccggca agagggtggc gcctggactc tcgccctcag agggaggccc
                                                                       60
gtcccacggt ctgtggctac ggatcccagg accetetteg egggcgatte gegtageete
                                                                      120
aggtaactgc atcctgccca gcatgacggc cccctgcccg ccgccacctt cagaccccca
                                                                      180
gtttgtcctc cgaggcaccc agtcaccggt gcatgcgctg cacttctgcg aaggagccca
                                                                      240
ggctcagggg cgcccgctcc tcttctcagg gtctcagagt ggcctggtac acatctggag
                                                                      300
cetgeagaeg eggagagegg ttaccaccet ggatggeeae ggeggeeagt gtgtgaeetg
                                                                      360
getgeagaeg etgeeceagg ggegecaget ceteagteag ggeegggaee tgaagetgtg
                                                                      420
ectgtgggac ctegeggagg geaggagege tgtegtggac teegtgtget tggaqagtqt
                                                                      480
gggcttctgc cggagcagca tcctggccgg gggccagcca cgctggacgc ttgccgtgcc
                                                                      540
agggagggc agcgacggag gttcagattc tggagatgcc ctccaagacg tcagtgtgcg
                                                                      600
ccctgaagcc gaaggcagat gccaagctgg gcatgcccat gtgcctgcgg ctgtggcagg
                                                                      660
cegactgeag etecegeeea etecttetgg eeggetatga ggatggateg gtggteetgt
                                                                      720
gggacgtete tgageagaag gtgtgeagee geategeetg ceatgaggag eeegteatgg
                                                                      780
accttgactt tgactcccag aaggccaggg gcatctcaag ctccgcgggg aaggcgctqq
                                                                     840
ctgtctggag cctggacggg cagcaggccc tgcaggtgcg tgggactcat gaactcacca
                                                                     900
atcccgggat cgccgaggtc acgatccggc cagatcgcaa gatcctggcc accgcaggct
                                                                     960
gggaccaccg catccgcgtg ttccactggc ggacgatgca gccactggcc gtgctggcct
                                                                    1020
tecacagege egetgtecag tgegtggeet teacegeega tggettgetg geegeggget
                                                                    1080
ccaaggatca gcggatcagc ctctggtcac tctacccacg cgcatgactc acccactccc
                                                                    1140
ttcccgggag acgaggaggg cgggcaggga ggtgggcatc aggccccagc cttggcctga
aacctcaagg gcctctgagg accagcaagt catggcccaa ggaccatgga gtccccqctq
tetteatgag ateagaetge acaaatgtee agtgtetgaa eegeatggaa gggeaggat
                                                                    1319
```

```
<210> 3536
<211> 2304
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2290)...(1254)
<223> similar to gi3403236 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3536

ttttttttt tttttt ttttaatggg gtttttcttt taataagggt ttttactcaa aagtgtagct 60

ttgaaaatct ctagcttgtt gtgaaaacca ggaaagccaa ggagctgcct cacactgcac 120
accaccacgt gtaagctgtg ggccgctgtg gtgtttgcaa actctccatt accaaggctg 180
gaatcaaatg caccacttta aaatcagagc caacatttta aatttaggag gatgatgcat 240
gtcctacttt tgattcaagg agaaaggaca agttcttagg tacaggtaaa acaaaacaca 300
aaagtaaaca aatctttaga aatcactata tatatgtgtg tttatatata tatttttata 360
```

```
taattaggat tatcatcatt tcaaactatt aaaaataagg ttgccacctt accttttctt
                                                                      420
ttggtaatgg ggtgttattt tttttaagag aaaaaaccaa acattttgcc cagactctag
                                                                      480
agtiticceaa citicaatici giitticigei gigcaacitic cecaecitica egetgiatee
                                                                      540
ccaagtcccg ccaccaattc tggctggcag gaggcagagc aagctttcat tctggtcatc
                                                                      600
aagatgacag gcccacaaaa gtacagctga gacgggaact gaattcttcc ccaggaagaa
                                                                      660
aatacctata cccacaatag gtctgcaaaa tctcccacag gcacctcttc tccctttctt
                                                                      720
gtggttgttt gttaattggt ttgttttgcc taaaagcaag atggcaatct taatcaaaaa
                                                                      780
gggaagctag atttttaaaa taacttaaaa aaaccatttt tatataaagc agcaaaaaca
                                                                      840
tatetteete tetgeagaaa gaaaaatgtt aacaaggaaa cacagegatg tgaaeggaet
                                                                      900
gtccgtcaac tcctgctcca ctggatcccc catccagctt cacctcgagc tactccttaa
                                                                      960
etccagcagt getgtetgaa gaagateett tggegtette aactgetett ttactttett
                                                                     1020
gattgagact ttcattttcg gacctggtcc cattagggat agagttttca ccgtttacaa
                                                                     1080
gecegtitte igiggeetti gettigeiga tigeetetei gaigticaag geatéeigea
                                                                     1140
etccageete etcetegagg ttteteaaga ecagggggag eetegagtee eecaegetge
                                                                     1200
totocaacag cocaaggita cictotical attigggaag cggagcotti tootocatot
                                                                     1260
gttggcgata gtattcccgg ttgacagetg cactetttae tgetttttee aaaatetett
                                                                     1320
teteacetaa gegeaatttg atggeeattt ttgeaegaae agaaagateg tggtttttea
                                                                     1380
agacggattt atcttcctca atagttgttt tatatgtttt taaaagaagt gaggctctat
                                                                     1440
cttcaagaaa tgtccaaagt ttgacctcgt tgtcccagct aacaggaaat tccgagttcc
                                                                     1500
ccaaggtgaa gattctatca atagcgctgt ctcccagcaa gtgttctttc agttcttctt
                                                                     1560
cagicataca gaatacicgg agaaaagcca aaagcigagc agagatgggc ggctcggtaa
                                                                     1620
aatgcaatgc aaaaacactg gaagtgggga tgccggcacg agccaagacc tcggccttca
                                                                     1680
tggcgtagag tctgtcactt ttactcactc caagctttat tttcactctg tcgtgtgagt
                                                                     1740
tattgtcaaa gaaaaaacca ctgtggatca caaactctgc gttggatcga gtgccataaa
                                                                     1800
aaatgtaaat ctgctctcca gcccgaaaat cctgcagagc cacacactca cagcggtcat
                                                                     1860
cttccaggtt gtaaccagta gtgatcaggc cgttggtgtg gttacacata tcccataaag
                                                                     1920
gaatcagage cagggtcacg cgggaaccat cetetgtggg aatttggttt tgeetegtea
                                                                     1980
taacagaaga gactgcccac ctgtagtcct cgtaagtgaa agaatccttc aagggtagtt
                                                                     2040
tgttggcatg aggatgggtc tggatgactt tatagaagta ggcgtactgt cgagctgtgt
                                                                     2100
ttttatactg gctgaagaca tcatgtatag cttgtgtgga ctgaagatac cgaacttcat
                                                                     2160
cttcttcaaa gtagagagga gtgtcatatt ccctggggag ggtttgaata tagggctgcc
                                                                     2220
agaaggagtt agggctggct cgctccccca gcaaatgaaa ggccagtgcg atgtttccca
                                                                     2280
tggcttgaag gattcggtct tgag
                                                                     2304
```

```
<210> 3537
<211> 5048
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5049)...(1236)
<223> similar to gi3947690 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400>-3537
ttttttttt ttaagatgga gtctcactct gttgcccagg ctggagtgga gtgattggag 60
tgatgcggtc tcggctcact gcaacgtccg cctctcaggt tcaagcaatt ctcctgtctc 120
agtctcctga gaagctgcga ttacaggcgc ctgccaccac gctcggctat tttttcgtat 180
ttttagtaga gatgggttt caccatgttg gccagcctgg tctcaaactc ctgacctcaa 240
```

```
gtcatctgcc caccttggcc tccccaagcg ctgggattac aggcgtgagc caccgcgcct
                                                                       300
ggcctgattc atatatatta ctaactgaaa tgcagtatca ctgcacttcc ccaattagta
                                                                       360
aattcaatac atcctgtatg taaaaaaacc caccaatccc cacaaaaaac caatcaaaca
                                                                       420
aaaaccccaa aaaaatcacc aaaccatact gtcaagcgaa atagttttaa ttagtaggct
                                                                       480
gatcataaat aaatctacat aaaagattta acagaattac aaagagtttt gtgttccttt
                                                                       540
gtggactcaa ttcataatat gcattagtca acctcattct ctaactgtga caaaaagagt
                                                                       600
tgtcatccaa caatgcagca cagtttaagc aattcatatg ctatagttac atttttacat
                                                                       660
tttctttaca aatgtaacat ttatgtacat tatatataga tttttttcta tagttcatgt
                                                                       720
actgaaactc tattgttttt acagagaaaa tgttgaattc atttaatgaa taagaaacat
                                                                       780
tccttgttaa aaagtaattc atataaacaa ataacacggt accaatgcct tttggcatct
                                                                       840
cttgccagag ttcaagtcca gaaatgttat attaattata agaaaaaaga atttatctaa
                                                                       900
ttttacatta tgacatatca ttccacatag ctacataaat ttgccagctt gcaatgaaca
                                                                       960
gagcactgta ctgccatact actggaaatg tgtagaaacc aattcaaaat atacttggtg
                                                                     1020
aaacagcatc atcgttacca ttaatttgag ttgaaaaaga tctgtcaagt tctttcttcc
                                                                     1080
cctttacttt ttaccaaagc ctcagacaga gtgctgtgcg ttgcatcttg tattaacaaa
                                                                     1140
tgccttcatt tcaaatttct cacgcgcttc tctgacagat tatgctttac ctaggttata
                                                                     1200
gatctttttc ttattcaatt ttattctact tcacttacaa atctgctgct gaacatgaag
                                                                     1260
caaaaattca tagtaagaaa atgcagcctc tgtccggtct tcaatcaaat gctgaaaaaa
                                                                     1320
ttctgctttg gcaggactct catcttttac tatgtgaagg attggactta atggtctgct
                                                                     1380
gtctctaagc caagttatga aggatctggc tctttctgat gaaagtgtat ctagctctgg
                                                                     1440
aagatgtgtc attttctgtg gtattgatgc aaaattagta tatccaagca catcctctat
                                                                     1500
gaagttattg tcacagcctt tcccaaccca aatgtaaaaa acagagccac agtccataag
                                                                     1560
gaaagcacct tetettgtea gettetetge agacaatttt tgaagaggtg getgtggtae
                                                                     1620
aatcctgtca ttaacatgta ctgcaccctc atctgtcaat ctgtctatcc tgtataagtt
                                                                     1680
gggatgaatc attttcatta gatgaacaag tggctgagac tttatctgac acatggcata
                                                                     1740
tacacgatca tecageegtg tgettgtace egttetaaat getttetgtt tgagaaggge
                                                                     1800
caaaacatag agaggaaaca acttgaggga gctgggcgcc atcaatgcag agtgctgtaa
                                                                     1860
atttgagaca gttgagccat atgcagacaa tgagtccact acagcattca ctaaggcatc
                                                                     1920
tettgeatet gacagaettg atgaaacgga cegatecaca gecatgtttg ecagaaggea
                                                                     1980
gatggcagct tgtacatcca ctcccgcata tacatctgat agtgaactta ccactggcaa
                                                                     2040
acaaagtgta tgtactctaa ttctccgctc acctttgctt gatgtatata atagggctgt
                                                                     2100
ttgaaaacat actaaggaag tatctgttaa actttcttca attgacaact gcaccgcaaa
                                                                     2160
tccagcatca ggattgatgt tggcaaggga taacaaatca gtagaacgga caaagaagtt
                                                                     2220
accgtgaaaa gtgtgcattg aaagaccttt agtacacctt attctcataa cagcttcaaa
                                                                     2280
cccaattttt cttgtgagat accgttttag gtctttttgt aacttttctg cttgtgaagg
                                                                     2340
attgtgagta tagtggaatg atggataata atagatgcac cctgcagaat acttggacat
                                                                     2400
gcaagctaga gaagcaagat cagaatactg tgaacttaaa aggaacaaat ccactgcagt
                                                                     2460
ttgctgtccc gagcaatcta atgcaagttt cttataaaaa tcagttgcag ggccaagatg
                                                                     2520
ttgtaccacc tttgtacttg atctctgatt aggatcttct ctggattgca gaagtcctgc
                                                                     2580
acccaaggaa ggtaactgtg tctgaaatac agacacacgg ccacctgttg gagacattaa
                                                                     2640
tttaaaggca gcctgaagtg caggaccaag ggcactgtgt gtttctcttg tattggtgaa
                                                                     2700
catgitiggt aatgcatica glaagictit tataagctct ttactitcat atagaticac
                                                                     2760
aagtaaacta teeggtgtag gtagaaaaac atcatetata teagacacaa teaacatttg
                                                                     2820
aggetgtgat aateetteet gggtaaattg tagaaatgaa taggtgetta teaaaggtea
                                                                     2880
tgaatcctat tettggtteg tgaattetee aggaagettg tetagatttt tetaggagtg
                                                                     2940
actggcacca aaaattgtca aatatccagc ttccactgca ttatgagaca catctaaaac
                                                                     3000
aaacaagtaa actgcaggtt gaggaggacg cagcatgtaa tctgaagaag caatgaactc
                                                                     3060
cacagttgga attetgaact tetggtegtt tatgaggete tecataagat egggtaaggg
                                                                     3120
ggttatacat aaattettea ggaacategt ttactetata gcacaaattg catttecate
                                                                     3180
tacgttgatc aatgaaggat acaaacgggg ttaatatacg ttcgacagga tcggcacctc
                                                                     3240
acaatggtat ttgatgttat cactggtaat tgcgttaggt ctctgaaggg atgtaacaac
                                                                     3300
aatcctaaag gaagcttagc tttattcagt aaagcctgtg tctgtggaat atttgtcaaa
                                                                     3360
gtacaccgaa atgaatctgg gctacagttt aattttttga ggtctgcatt caagttaggt
                                                                     3420
acaggagece aaacaggagt cataggtaaa atatteetet eetgagtaag gtttacaggt
                                                                     3480
ctcaggcttt ctggttgtgg agaactctga agactcaatc ctcctatact ggaggatagc
                                                                     3540
tggttcacac caggatactg ttgaggatac tgctggaatc cagaatatac cgggttactg
                                                                     3600
gggctgtact ccagaaataa gtggtgctgt agcattctga taaccaggct gaagtgttgg
                                                                     3660
```

```
atagecatag ccaaaggett agecattttt gaaggetgag ggaegaeagg agetggaget
                                                                     3720
gaagctggag ctggagcaga agcaggatca ggttcagggg cgggatcagg agcaggactg
                                                                     3780
cttgctgatg aagaaagcat atctgggtaa ctgcctcctt ccagggcatc ataactgttg
                                                                     3840
ggcattggag aagcactgct tgtggtagaa gagctgtcaa cacctgcttc ctcatcctcc
                                                                     3900
tecteetett ceteateate ggaagttgat gacaagggag ttggtgegga getagettgg
                                                                     3960
ttattaacat attcaccata ctgcacgcct ttttgttgta atagctctga tggctgtgta
                                                                     4020
actgaggtca caggctcaac tgggtgattt gcagtgggag gtgttcttgt tgatgaggat
                                                                     4080
cctgaggatc ctgataaaac agtggatacc actgggctgg acttgggagg ctgaacattt
                                                                     4140
tgcataacag gacaggataa agaatctgca acagtaatgg ttgggttgtt gttcgctaca
                                                                     4200
gccagggatc ctgtgtggtt tcggatgaga ttgtcttgag tcgatggaag gcctggagat
                                                                     4260
gaccacgtta gagtactgta tcctgaaaga ctttgctgct ggtggtgctg ttgtgatqqt
                                                                     4320
agaggtggaa gtggcgatgg atggctgata gctgtatttt gaccagagaa tgaattatct
                                                                     4380
ttaactggcc taacagtcgg agcattctgt gaggtaaaca tttgcccata tgtatcacca
                                                                     4440
gcaggcagag agggatatga aacactagga tacgcggcat tagaaacagt tgacatagca
                                                                     4500
taatgaccac aagtagaggg aaatccctga gacgcaacag aagagctggc agagtacatg
                                                                     4560
gctggactat tgtagtgatt cacaaaagag gagtatggtt gggaggcact cqtatqcaaa
                                                                     4620
tgggatgctg acgatgcagc accttggaaa gatcctagag tggatcccac aatatgaggg
                                                                     4680
gcaggaggac ccctgctgta caactgctgt gctcctggtt gctggttcac tgtgttagga
                                                                     4740
gtcacatttt gtgttggtac tgtatagaga gcagagtagt aatcaccaca ctgggtatcc
                                                                     4800
aatggcaatg aggtcatttt cccaggtcct tgagagtaat gtcctgaggg agcaatatag
                                                                     4860
ttttgatgat gcaatccata tccagatgga acctgcattt gattctgggc tggaccgttc
                                                                     4920
tgctggtgcg gcgccgggcc cgcacccggg cccgcgggcg ctgcggctcc tgagacggcc
                                                                     4980
gateegeega aettgggegg gateegggeg, etggeggeeg ggtgagagga eeeggeggg
                                                                     5040
gccgacat
                                                                     5048
```

```
<210> 3538
<211> 606
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)...(423)
<223> similar to gi2302524 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3538
ttcagtgctg taagaaagga cggaggctgt tatctatggc agatctatcc aataaaggag
                                                                       60
agaaaggacc gcatacgcct ggttctcatc atatgcaata aagagtttga ccatctgcct
                                                                      120
ccaagaaatg gggctgactt tgccatcatg gagatgaaga agctgcttga ggatctgggt
                                                                      180
tacagtgtgg atgtagaaga gaatctgaca gccaggataa cgtgtccagg agagacagca
                                                                      240
caaggggete catetteate acacaactea tegeatgett ecagagatat teetggeget
                                                                      300
gccacctaga ggaagtattt tggaaggttc agcaagcatt tgaaagtccg gaggcaacag
                                                                      360
tecaaatgee caccatagaa egagtgteea tgacaagata tttetacete ttteetggge
                                                                      420
aactgaaaat ggttaagcat tgagagttgt tggtggtgta tgaaataaat gaaagtgtga
                                                                      480
tattggagca ggaaaccaca agcagcccag ccctccttta tcaacttcaa gaaacacctt
                                                                      540
tactagtaca gattgaatgc ttaacatttt gtatttcaat aaaggtgaag acaaatgaaa
                                                                      600
aaaaaa
                                                                      606
```

```
<210> 3539
<211> 559
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (465)...(294)
<223> similar to gi1247386 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3539
ttttttttt ttaccaacaa agcctgcctt tattaaatag agatcgcgtt acattccatc
                                                                       60
caaagaagga aatccggacg tggtgaggga tgcgtccagg tgggagctcc gaacgctggt
                                                                      120
cctgagtggg ctctgatggg tgggagggcc caggtcctgc ctgcccaccc aggccccaca
                                                                      180
tgccagggcg cgtgtctgca tggccaccca cagctgaaaa caggcgtggg cgatctgaag
                                                                      240
ccctgtctgt gttctactgt ggcagaaagt gccccagtcc ttccagcggt tttgggagca
                                                                      300
ggatggccac aagggggtgc tgctggccca gggcttggca gctggggtgg agggtaccct
                                                                      360
ggagatecag ceaeceagaa eagteeettt etgaagacaa geeageaaca aqqeaeetqe
                                                                      420
aggcagttet ggggactggg gagggggege tggctgeete aggtgteece teceaaggge
                                                                      480
tgaggccccc cgagtatgga tccgagctcc ctggtctttg gtgctttctt gaaatcctcc
                                                                      540
tggtggtggc agaacccag
                                                                      559
```

```
<210> 3540
<211> 986
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (987)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) ... (662)
<221> misc_feature
```

```
<400> 3540
ggcacgagac gcagtgggct atccagaagc agcaatctca gggtaaccag aactagagct 60
gctcaaagaa aaactggtcc cgtttcatta gcaaatggat gtggcagaaa agccactcga 120
aagagagtct atttaagtga ttctgataac aattcattgg agactggtga aattctaaaa 180
gccagagctg gaaataaccg aaaagtctta aggaagtgtg ctgctgtggc tgccaataaa 240
```

```
ataaagetaa tgagtgatgt agaagagaat tetagetetg aaagtgtetg ttetggtegg
                                                                      300
aagctgcctc accgcaatgc ttctgctgta gctagaaaaa agttattaca taattctgaa
                                                                      360
gatgaacaga gcttaaagtc agaaattgaa gaagaggagc taaaaqatga aaatcaacca
                                                                      420
ttaccagtgt ccagttctca cactgcccag agcaatgttg atgaatctga aaacagagac
                                                                      480
tcagagtcag aaagtgattt gcgggtagcc cggaaaaatt ggcatgctaa tggttacaag
                                                                      540
teccatacte cageacette aaagacaaaa tttettaaaa tagagtette tgaggaagae
                                                                      600
tctaaaagtc atgattcaga tcatgcatgt aacagaactg ctggcccatc aacgtctgtg
                                                                      660
cagaaactta agggcagaga gcatctcaga ggaagcagat tctgaaccag gaagatctgg
                                                                      720
tggtaggaaa tacaatacat ttcacaagaa tgcgagtttc tttaaaaaaa ccaagattct
                                                                      780
gagtgactca gaagactctg aatctgaaga gcaagataga gaagatgggn aaatgtcata
                                                                      840
aaatggaaat gaadccaatt tenggaaate tgacetgtga eectattget atgteecagt
                                                                      900
gttcctcaga tcatggatgt gaacctgatt tggattcggn tgatgccaaa ctggaaaacc
                                                                      960
caacaatttt tttgaagatt ctgctt
                                                                      986
```

```
<210> 3541
<211> 792
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (784)...(656)
<223> similar to gi2565069 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3541
attgagacca tagagagccc ggcggaattc atttttttt tcaagctaga aatattacgg
                                                                       60
cttatgaagc atgtgagaca gtccccgcca tgtgctgatt acacagaccc ctgtaccaga
                                                                      120
aatcagaagg aaaggagtca gacttgaatc aaagaaatgt ctctggcaca caggccttca
                                                                      180
aattgatggc tggagcctgt cttttaagaa caaattaatt cattatagga aaaaccctaa
                                                                      240
ctaattgaaa ggtctaaatt cttcaggttc tcttgtgatc ctgggaaatg ctagaccgtg
                                                                      300
agcatcttga tggaggatgt gaactgccac ttcctcacag gcagcaggca ggtgctgaat
                                                                      360
aagtgettge tgaatgaatg aatgaateae geeaagggge atgttaeetg tteegeeaaa
                                                                      420
atctgctgct gctgctgctg ctgctgcctt tgctcccgca ggaactgttg cttctgctgc
                                                                      480
tetateaact gggcccgctg atcaatgage atctgcttca tgatggctgc ttggggctgg
                                                                      540
ctgcccagga agccggggcc tgcgggactg gctcctgaga ccatgccacc tgagcctggg
                                                                      600
ggcacggagg actgcatggg gcctgtggtt cggggaagtc caactggatg ctgctcctga
                                                                      660
ccgtgggatg gaagtgcagc gtaagccatg ggctgattca tcactccttt ctgcttcatg
                                                                      720
agaagcaggc gtttctggtc ttcgctcagg tgtgccctgg gggcctgaag ctagaagagg
                                                                      780
cggacgcgtg gg
                                                                      792
```

```
<210> 3542
<211> 4490
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (4493)...(772)
<223> similar to gi4240307 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3542 ttttttttt ttggtgcagc gatgtttaat ggcaattcgt ataaaccaag cccatgcaca 60 agtagaaagt gcccgtggag ccggcaggag gcccccgccg cgctagagaa ccacaagccc 120 ggccgtgcag ccctccccgc ggcgccttaa.atagattctt cactatactc tgtatgttac 180 agtatgtaca agacccctcc cctcggggga cggggcggac tccgcaacgc gttcctatgt 240 acaccacete ecetteggee etgaggteag tggeeagagt egggtgatgg ggtaagaeag 300 ggccagagag ggaggaaaca gacgcaaaca tgcggagtcg ggtggggaca cggtcagcc 360 tgaaacacga ggggcgtgcg cagcgaaggc agtggtggga accgaggcgg atacattcag 420 agacgcgtcg aacaaataaa taaggcaagt caggaggggg ccgagtcggg tgcaggcagg 480 aggagetggg gageaggge aggeaggget eeggaggtea eageggaaga tgeaggtatg 540 tggggcgcgg gttttctgga gccaggacca aaagagacgg ggcacgacca ggagggacga 600 ggagagggt gtgggagcaa ggcgtgggga ggagggagga ggcctacaga gggctccaac 660 aaaggtgaac aggaaagetg ccgacagggg ctccccctgc cccagaaagc cctctccctg 720 ttaagactgc acgaggcgcc cccagggtgg tgagaaaggc ggtggccagg tcatgtggcc 780 agtcccggct ggggaagece ttccagetee tggttctgct tcagttccct catcctgtgt 840 cggcagcgcc gcaggaatct catgatette cgggctgcct ggtcctgctt cttggtgaga 900 aaggageett tgttgeggge aggeagggtg geegaagtee ggtggggagg geegggeetg 960 eggeggtagg ageggtagtg etgetggatg ageacageeg eteggegget etgetgaaat 1020 cgcttctgtt catagtagct tcggaacttg ctctggatca ggatggccgc ctgggtcatc 1080 ttottataga gtgcaaactt aagtgcaatc caggtcagct gcttgtactt ccggtaacag. 1140 cgctggatta cagctgctgc tacctcctgc tgctccttca gccgccggcc cttgtacttt 1200 cggaaggccg tctggatgac tcgggcagcc tcatacagtt cccgctgctc ttgaatctga 1260 ataatgtcaa caaggcaaaa atcaactttc caatcttgcc cactggtgga atgcagagag 1320 aaactetgee caggagggtg etgtaaggga caageecagg egaceteege teaaagggea 1380 agttegetgg gaggggttga getggggaaa tggteeaeat teteeeaggt agetggeeag 1440 ccaggacatg gtctcactga gccccacage ccctgtccgc tcccgcattg aggctccage 1500 ctcgggcagc cccacgaagt cctctcgttt aatccgctcc ggtgtggctt cgatgatctg 1560 cttggctagt gagatcatgt ccaccgggat cacatccaca gcctgtgggc tgtcagcgtc 1620 ctccggagca gccccatcat ctgaagctgg tgggaggca ggaagggagg agagggccc 1680 cttggagttg gtagcctcat agtccatgag gagtaggggg gcttctggga caccagagga 1740 aagctggcct ggggccatgt cctccatagt catctcagag gctggcagag gtgcagggg 1800 1860 ctccgagggc gaggagacgc tgctcagacc agtgtctggg ctggaggagg gtggcgatag 1920 ggcaaatggg ggctccaccg aaggctcctg tctctgtagt tcctcaaggc agcgggcaag 1980 gcgcacatga ccccgggaat gagccacaga caatggcaga cggcccagag agtcgggaat 2040 geteagtgee tgteggttee aacggaaaag gagcacagca gettecaggt gteecaggge 2100 acaagcccac atcagagggg tgcaagagaa atgatccacg ttgagcgggt caacctcctg 2160 ctctaagtcc aagcttccag tctccacact ccgccactgg ctcagggtct cgatgaggcg 2220 ggcatagccc tgggcagcag ccaggtgcag aaggctcatg ccccggaagg ggcttccatg 2280 ggccagacgt tcaggaccct tccaggtgga gcgtgggatc atgctttcta ccaagaccac 2340 taccogtget tegaacceag geocetggee tteatectga actggaggag cateaggace 2400 ctggcaaggc acctgcccag ctgctgcgat ctctgccatc cgcttctcca tctgctccag 2460 tegetetagt atggacatee ggaactggtt gtegteeagt gacageeagt caagttgagt **2520** actaggcaga gacaggaatc ggcgggctcg atactcaaag agcacagaag cagaaagggg 2580 cccctcccgc cctgccacct gcaaagacac cagccctacc tcatgggcgg gacagtagca 2640 gcgtaagaca ccaggctgga caagtgaggc tggcactgcg atgtgatcaa agacacagga 2700 gtaatgctcg gcggcttcgg tccaaggacc tgtgatgagc accttgaccc caccctctgg 2760 gtaggaccac tetggggaga agtetgtgat ggtgetaaga geaggagaca getggggggt 2820

```
tggagcaggg atgcttggag cttcgtcact gatgagttct cccataaggt ctgggaatga
                                                                     2880
tgaaagactg aagggeteea gtteaetgge eecaacaggt eeteeaaaca aggeetetee
                                                                     2940
tetteetace etgettgaeg geteeaaggg ggeaggtgag ggtgggggtg agggaggggg
                                                                     3000
tgaaggtatg ggtggggcag ccccgtgacc cttgagctcc tccccactgt catcatcttg
                                                                     3060
gatgaagaag cagtttcctc ttctcccacc tgctactgac tgtggtgggg gaccccgagc
                                                                     3120
agctgcctgg ggctccaggg cagcagcagg ctctagggca gaacaggggg tatgagcggc
                                                                     3180
etetgeeteg gggaagtetg ggettaetee etgeeeceet ceatatgtet ggeeectetg
                                                                     3240
ggggctgttg agaaaacgat cagggtcaaa ggcaggactg ggaggagctg gtggggcaga
                                                                     3300
aggeteagtg cetacaacca etgecaaact catggaagge etaggateag eetgtggage
                                                                     3360
caagtgcctg gtgggcgtca agcctccagc ccgctgctcc agtcctgtca ggaggaggat
                                                                     3420
agragtgcct cctcttgaag aaccccctcg agaagtggga gggctaggtc tgatttctag
                                                                     3480
gggctctgca aaacctgatg aggaggaaga agaggaagaa gatggggagg tgtgtgcctt
                                                                     3540
ggggagetet gggggaagtg gggetateag tggaggagge tetggggggt gagggtgggg
                                                                     3600
gatagaggtc agggttaaag ctcggggctc cactttggga gagatgatgc ggtgtttcgt
                                                                     3660
gctgctgcat ttgtgggtaa ggctcccaga accaagcccc ccactgcaga gacaggcgtg
                                                                     3720
ggttcgggga gcaggcttgg ttgggtgggt gtccaaaatc tgctgcacca ggtgttctac
                                                                     3780
agagaactet tetgtteeat teeegeaget ceaettgatg ceatgaaaca tgggetteag
                                                                     3840
ctgtcccaac aactcctccc gggaccactt cagccactct cgacggtcgc tgctgatgga
                                                                     3900
acaaaagatg gggctgcagc cctttccaca gtcctccagg gctgggacgt tcaggtagtg
                                                                     3960
cacaaggacg atgtcagggt tctggagcag ccagtagcag cgccgatgga atgtggggac
                                                                     4020
gatggaagag tgaacgtagc agccatagag acactccatg ccctggacct tcagcttcat
                                                                     4080
gtggtcctct cgggtggtct tcccatcctt ccgcttcttc cagaggtaac catccttccg
                                                                     4140
atatttcacc ttcttgcgat tgtagaggat gatggagcca ttctgaggcc ttgtctttgg
                                                                     4200
ggcacaagac agccactcat catgettete aaaggtgate aggtaggatg caateteete
                                                                     4260
atttgtattc caccgtagcc tctctggagg cagcagggg cagcgaggaa gacactccag
                                                                     4320
cagcttcttg gggagaaaga tcttcaggtg gtggctgttt tcagcaacct cggtggtgtc
                                                                     4380
cttggtattc atggtgaggg ctccaggggg caaggtcacc cccggcctga ggggccgggg
                                                                     4440
ggaggggag tetgtgetee eggggteeeg egggtgaegg eggeagegge
```

```
<210> 3543
<211> 823
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (67)...(318)
<223> similar to gi4929597 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3543
ggaattecae tggcetteet eteggaggga caaggaageg tggceteeet tteacteace
                                                                       60
ttacttttcc ttctggtcca gggccagctc ttccgaggct ccagcctgct tttccgccgg
                                                                      120
gtgtcatcag gatcatgctt tgccctggag taacctgaat catctaaaaa acacggtctc
                                                                      180
aacctggcca ccgtgggtga ggcctgacca ccttgggaca cctgcaagac gactccaacc
                                                                      240
caacaacaac cagatgtgct ccagcccagc cgggcttcag ttccatattt gccatgtgtc
                                                                      300
tgtccagatg tggggttgag cgggggtggg gctgcaccca gtggattggg tcacccggca
                                                                      360
gacctaggga aggtgaggcg aggtggggag ttggcagaat ccccatacct cgcagatttg
                                                                      420
ctgagtctgt cttgtgcaga gggccagaga atggcttatg ggggcccagg ttggatgggg
                                                                      480
aaaggctaat ggggtcagac cccaccccgt ctacccctcc agtcagccca gcgcccatcc
                                                                      540
```

```
tgcagctcag ctgggagcat cattctcctg ctttgtacat agggtgtggt cccctggcac 600 gtggccacca tcatgtctag gcctatgcta ggaggcaaat ggccaggctc tgcctgtgtt 660 tttctcaaca ctactttct gatatgaggg cagcacctgc ctctgaatgg gaaatcatgc 720 aactactcag aatgtgtcct cctcatctaa tgctcatctg tttaatggtg atgcctcgcg 780 tacaggatct gggtacctgt gcaattttga aaacccattg gtt 823
```

```
<210> 3544
<211> 1533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1534)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) ... (1089)
<221> misc_feature
<222> (1) ... (1089)
<223> similar to gi3287501 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3544 cagatggage acgtggteca ggettgecae egetteatee aggeeageta tgaacetetg 60 ggcatetece tgegececet ggaageagaa cececaacae ecceaacgge cectecacea 120 ggtagtccca ggcgctccga aggacaccca gacccaccta ctgaatctcg aagctgcagt 180 caaggeeece ccagteeage cageeetgac cecaaggeet geaactggaa aaagtacaag 240 tacategtge taaactetea ggeeteecaa geagggagee tggtegggga gagaagttet 300 ggtcaacctt gcccccaagc caggctcccc agtggagacg aggcctccag cagcagcagc 360 agcagcagca gcagcagcag tgaagaagga cccattcctg gtccccagag caggctctct 420 ccaactgctg ccactgtgca gttcaatgtg gggctccagc cagtaccccc tacctcctca 480 catcccagge teaagacace tetggateae cetetgaaeg ggetegteea etacegggaa 540 gtgaattttt cagctgccag aactgtgagg ctgtggcagg gtgctcatcg gggctggact 600 cettggttcc tggggacgaa gacaaaccct ataagtgtca gctgtgccgg tettcgttcc 660 gctacaaggg caaccttgcc agtcaccgta cagtgcacac aggggaaaag ccttaccact 720 géteaatetg eggageeegt titaacegge cageaaacet gaaaaegeac ageegeatee 780 attegggaga gaageegtat aagtgtgaga egtgeggete gegetttgta eaggtggeae 840 atctgcgggc gcacgtgctg atccacaccg gggagaagcc ctacccttgc cctacctgcg 900 gaacccgctt ccgccacctg cagaccctca agagccacgt tcgcatccac accggagaga 960 agecttacea etgegacece tgtggeetge attteeggea caagagteaa etgeggetge 1020 atctgcgcca gaaacacgga gctgctacca acaccaaagt gcactaccac attctcgggg 1080 ggccctaget gagcgcaggc ccaggcccca cttgcttcnt gcgggtggga nagctgcagg 1140 cccaggeett getteectat caggettggg cataggggtg tgecaggeea etttggtate 1200 agaaattgcc accetettaa ttteteactg gggagagcag gggtggcaga teetggetag 1260 atctgcctct gttttgctgg tcaaaacctc ttccccacaa gccagattgt ttctgaggag 1320 agagetaget aggggetggg aaaggggaga gattggagte etggteteee taagggaata 1380 gccctccacc tgtggccccc attgcattca gtttatctgt aaatataatt tattgaggcc 1440 tttgggtggc accggggcct tcattcgatt gcatttccca cccctctct gaattgcccc 1500 tgcggacgat gctaggttca ggnnnnnccc gct 1533

```
<210> 3545
<211> 607
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (138)...(494)
<223> similar to gi5596693 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3545 cctgggcgtg ctccccggg cacctactcc taagagtacc cattacatat cagtttccct 60 caccaagete agececetet gecetetigt gagteteetg agtecetttg gagtecetet 120 cttgctccca tgcagacaac tggaagcagg agctgacaaa attcatcagc cccgaccagc 180 tgcctgtgga gtttgggggg accatgactg accccgatgg caaccccaag tgcctgacca 240 agatcaacta tgggggtgag gtgcccaaga gctactacct gtgcaagcag gtgaggctgc 300 agtatgagca cacgaggtec gtgggeegeg geteeteeet geaggtggag aacgagatee 360 tgttcccggg ctgtgtgctc agatgtcctg aggttttaca acacctacag cctggttcat 420 tctaaacgca tcagctacac cgtggaggta ctgctcccag accaaacctt catggagaag 480 atggagaaat tetaggtgaa ceteatggte eecacaeeet eetetttgat etetgaatee 540 acaatgagtt cacagcette cetggecaga ceetgtteaa ceteteagga acagggatte 600 tacaaca 607

```
<210> 3546
<211> 907
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (265)...(747)
<223> similar to gil256001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3546
tccagtgtgg tggaattcgg gctgtcagtg ctcggaggcc tcttcctgct ctttgtgctg gagaacatgc tggggctttt gcggcaccga gggctcaggc caagatgctg caggcgaaaa 120 cgaaggaatc tcgaaacacg caacttggat ccggagaatg gcagtgggat ggcccttcag 180 cccctacagg cagctccaga gccaggggct cagggccaga gggagaagaa cagccagcac 240 ccaccagct tggccctcc tgggcaccaa ggccacagtc atgggcacca gggtggcact 300 gatatcacgt ggatggtcct cctgggagat ggtctacaca acctcactga tgggctggcc 360 ataggtgctg ccttctctga tggcttctcc agcggcctca gtaccacctt agcggtcttc
```

```
tgccatgage tgccccacga actgggtgae tttgccatge tgctccagte agggetgtcc
                                                                      480
tttcggcggc tgctgctgct gagcctcgtg tctggagccc tgggattggg gggtgcagtc
                                                                      540
ctgggggtgg ggctcagcct gggccctgtc cccctcactc cctgggtgtt tggggtcact
                                                                      600
gctggggtct tectetatgt ggeeettgtg gaeatgetae eageeetgtt teegteetee
                                                                      660
ggageeeetg cetaegeeee atgtgeteet geaggggetg gggetgetge tggggggetg
                                                                      720
ceteatgett gecataacee tgetggagga geggetaetg ceegtgacea etgagggetg
                                                                      780
atggggccag tggaaagggg tegggttgee etteetteee eecaaceaea ggaatggagg
                                                                      840
cgggacacag ggccagtagg agcaatagga ttttaataaa caqaacccat cccaaaaaaa
                                                                      900
aaaaaaa
                                                                      907
```

```
<210> 3547
<211> 780
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(351)
<223> similar to gi3236368 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3547
ggaattccac gctgcttttt ctctttccta aatgcagcgc ttgcttgggg acttcaaggg
                                                                       60
aaggettttg gttggtggge tgagtgaeee caggeteega gaggggeagg cattgettgg
                                                                      120
gaggaggtgg gagatgcacg catgccctta gctaggcgtg gggtggctca gttaagaagg
                                                                      180
gcactgcctc cgcagcccct cggcgctcag ccagctgcag ccccaaaggt ctagggcttt
                                                                      240
agggaaccga tccaggtttg ggggcgggga gaaagttctg aggcagctcc tccctggaca
                                                                      300
gagcagggcg accordegc gggcetgcag getectacag ctactgcccg ccagcqqqca
                                                                      360
aggegaaggg cectaecage cagetgageg ggggattgtg etgtaggeec tecageaget
                                                                      420
getetaacce etgecaagee tggtgeacae eetegegget etgeaceage egetetgegg
                                                                      480
gcageteete tacagageca getgaggeca egatgecata gageteacag aggetgtgee
                                                                      540
gegecegeee caetggetge tggagetegg egggeaggee etggaggetg gagaceagge
                                                                      600
cactgtagge egtgtgeage tgeeggagaa ggeegeagae eetggaeaga acceeggeat
                                                                      660
cccgctcctg tgggaggaag gcgcaaggtg agtggagacc catgggcggg gtgggggac
                                                                      720
cctagccctg tgccagaccc atctcctgga cagcagcgtc ctccgcactg gcacctgagg
                                                                      780
```

```
<210> 3548
<211> 2796
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1655)
<223> similar to gi2827158 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3548 ggaaatccca acacggggga tccttcagct catgcacagt tgcaaagagg gctacgttaa 60 agatttgaaa ggtaacccag gcctgcacag ggccatgttg gatcttgata atggtacacg 120 teceteagag ttgggceate teagteagae agegteeetg aagaggggea geagetttea 180 gtctggtcga gacgacacgt ggagatacaa aactccccac agggtggcct ttgttgaaaa 240 attgacaaaa ctcgtcttga gccagctgcc taacttctgg aaactctgga tctcctacgt 300 taatggaagc ctcttcagtg agactgctga gaagtctggc cagattgaaa gatcaaagaa 360 tgtaaggcaa agacaaaatg attttaagaa aatgattcag gaagtaatgc actccctggt 420 gaagettace egeggageee tgetteeeet cageateegg gatggggaag eeaageagta 480 cggaggctgg gaggtgaagt gcgagctctc cggacagtgg ctcgctcacg ccatccagac 540 tgtaagactt actcatgaat cgttgactgc ccttgaaatt cctaatgacc tgttacagac 600 tatccaggat ctcatcttgg atctccgagt acgttgcgta atggccacgt tgcagcacac 660 ggcggaagaa ataaagagat tagctgaaaa agaagactgg attgttgaca atgaaqgact .720 gactteteta ceatgteagt ttgaacagtg categtgtgt tetetgeagt caetgaaggg 780 ggttctggag tgcaagccgg gagaggccag tgtcttccaa caacctaaaa cacaggagga 840 ggtttgccag ctaagcatca atataatgca ggtttttata tactgtctgg aacagttgag 900 caccaageet gatgeagata tagataetae acatetetet gttgatgttt etteeeetga 960 cttgtttgga agtatccatg aagacttcag cttgacctca gaacagcgcc ttttgatagt 1020 cctaagtaat tgctgctatc tagaacgtca caccttccta aatatcgcag aacattttga 1080 aaagcacaac ttccagggaa tagaaaaaat cacacaggtt agcatggcct cattgaaaga 1140 actagatcaa agactetttg aaaattacat egagttgaaa geagateeea tegttggete 1200 cttagaacct ggaatttatg caggatattt tgattggaag gactgcctgc ctccaacagg 1260 tgtcagaaac tatttaaaag aagcactggt gaatataatt gccgtgcatg cagaggtgtt 1320 caccatttcc aaagaactgg tccctcgggt actatccaag gtgatagaag cagtttctga 1380 agageteagt egactgatge agtgtgttte atcetteage aaaaatggag etttacagge 1440 gagacttgaa atctgtgctt tgagggacac tgtggctgtt tacctgacac ccgaaagcaa 1500 gtcaagtttt aagcaggett tggaageeet geeeeagett teeagtggag cagataaaaa 1560 gttactggaa gagctcctga acaagttcaa gagtagcatg cacttgcagc tcacctgttt 1620 ccaagcagct tettcaacca tgatgaaaac ataaatatet gccacataaa agaagtecag 1680 gaaaataaca cgtaataaga ctgttcactc tctaagtacc ctaaaggtat ttggtgtatt 1740 aaacattggg tttgccattt ttctcttttt tcttcctctg acttcgaaaa ttgttggtat 1800 acatttcaac caaaatgacc tcatttgaaa tgcccaggaa gtatttgttt tgccattctt 1860 actagatcag atcctgtatg actttaaaat acattttaaa atatattttg catctcagca 1920 gaaggttgag tgctgcagga agagctgctt ctgcagggag ttttctggaa tggcgtggca 1980 catattgaag catttctcag tgtcccgttc acggaagcgc aggcagctcc cacgacacac 2040 ggagagactg actgatacga gatttggaaa gctatgtaga catctttgga gctcttactg 2100 tectaaactg tacagetgtg ettaaaacce ttattteata taaatggeet taagttttet 2160 aattcaagcg ggtttttgga aaaatttatg gtctccatta aaatacatat tacaactggg 2220 gtagattatt tgtggtccag gtgtctgtga tttaactttg cgttttgcta tctgattttt 2280 attiticaca gggctaagca tgagctitca tictcactca cicttaatti gtcgtgcgtc 2340 actacacatg cacgtgttgc agtccctgag gccctgtgtg ttatctgtga tggagtgtga 2400 atgtgtaacg ggcactgtgt tacactctca ggtgttggcg gggcggtcgc agacttcagg 2460 gtcccctaac ggaaaggcca ggctccgcgt ggacggccaa ctccctgccc gctccttcag 2520 caggigactg teletgecae tiettacetg etgaaggate tigeteagta getggaacaa 2580 tgctgctgtc acacagtctc ttctctgaaa cttcaggatg ctccttggtc accaggcaat 2640 gggagetgta gaccageege atgeacttge eccaeattea etggtgaetg getteaetgg 2700 aataagttca ggtcaccggg acttctctca gagtcagcgg cccacccaac tccctcatac 2760 cgtcgcatct gaaaatttca gagaggaatc tctttg 2796

```
<210> 3549
<211> 4197
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(3727)
<223> similar to gil469193 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3549

```
geoetgetge ceetgageae acggaccegt cegaaccgeg gggcagtgtg teetgetget
                                                                       60
ecctgetgeg gggaetgtee teagggtggt ceteacetet getteeggee eetgtgtgea
                                                                      120
accetaacaa ggccatette acggtggatg ccaagaceae agagateete gttgetaacg
                                                                      180-
acaaagettg egggeteetg gggtacagea gecaggacet gattggecag aageteacge
                                                                      240
agttetttet gaggteagat tetgatgtgg tggaggeeet eagegaggag cacatggagg
                                                                      300
ccgacggcca cgctgcggtg gtgtttggca cggtggtgga catcatcagc cgtagtgggg
                                                                      360
agaagattee agtgtetgtg tggatgaaga ggatgeggea ggagegeege etatgetgeg
                                                                      420
tggtggtcct ggagcccgtg gagagggtct cgacctgggt cgctttccag agcgatggca
                                                                      480
ccgtcacgtc atgtgacagt ctctttgctc atcttcacgg gtacgtgtct ggggaggacg
                                                                      540
tggctgggca gcatatcaca gacctgatcc cttctgtgca gctccctcct tctggccagc
                                                                      600
acateccaaa gaateteaag atteagaggt etgttggaag ageeagggae ggtaceaect
                                                                      660
tecetetgag ettaaagetg aaateecaae eeageagega ggaggegaee aceggtgagg
                                                                      720.
eggeceetgt gageggetae egggeatetg tetgggtgtt etgeaceate agtggeetea
                                                                      780
traccetect greggatggg accateracg grateaacca ragettrgeg etgaractgt
                                                                      840
ttggttacgg aaagacggag ctcctgggca agaatatcac tttcctgatt cctggtttct
                                                                      900
acagctacat ggaccttgcg tacaacagct cattacagct cccagacctg gccagctgcc
                                                                      960
tggacgtcgg caatgagagt gggtgtgggg agagaacctt ggacccgtgg cagggccagg
                                                                     1020
acccagetga ggggggccag gatecaagga ttaatgtegt gettgetggt ggccaegttg
                                                                     1080
tgccccgaga tgagatccgg aagctgatgg aaagccaaga catcttcacc gggactcaga
                                                                     1140
ctgagetgat tgctggagge cageteettt cetgeetete aceteageet getecagggg
                                                                     1200
tggacaatgt cccagaagga agcctgccag tgcacggtga acaggcgctg cccaaggacc
                                                                     1260
agcaaatcac tgccttgggg agagaggaac ctgtggcaat agagagcccc ggacaggatc
                                                                     1320
ttctgggaga aagcaggtct gaaccagtgg atgtgaagcc atttgcttcc tgcgaagatt
                                                                     1380
ctgaagctcc agtcccagct gaggatgggg gcagtgatgc tggcatgtgt ggcctgtgtc
                                                                     1440
agaaggccca gctagagcgg atgggagtca gtggtcccag cgggtcagac ctttggqctq
                                                                     1500
gggctgccgt ggccaagccc caggccaagg gtcagctggc ggggggcagc ctcctgatgc
                                                                     1560
actgcccttg ctatgggagt gaatggggct tgtggtggcg aagccaggac ttggcccca
                                                                     1620
gcccctctgg gatggcaggc ctctcgtttg ggacacctac tctagatgag ccgtggctgg
                                                                     1680
gagtggaaaa cgaccgagaa gagctgcaga cctgcttgat taaggagcag ctgtcccagt
                                                                     1740
tgagccttgc aggagccctg gatgtccccc acgccgaact cgttccgaca gagtgccagg
                                                                     1800
ctgtcaccgc tectgtgtcg tectgcgate tgggaggcag agacetgtgc ggtggetgca
                                                                     1860
egggeagete eteageetge tatgeettgg ceaeggacet eeetggggge etggaageag
                                                                     1920
tggaggccca ggaggttgat gtgaattcgt tttcctggaa cctcaaggaa ctcttttca
                                                                     1980
gtgaccagac agaccaaacg tcatcaaatt gttcctgtgc tacgtctgaa ctcagagaga
                                                                     2040
caccetette ettggcagtg ggeteegate cagatgtagg cagtetecag gaacaggggt
                                                                     2100
cgtgtgtcct ggatgacagg gagctgttac tactgaccgg cacctgtgtt gaccttggcc
                                                                     2160
aaggccgacg gttccgggag agctgtgtgg gacatgatcc aacagaaccg cttgaggttt
                                                                     2220
gtttggtgtc ctctgagcat tatgcagcaa gcgacagaga aagcccagga cacgttcctt
                                                                     2280
ccacgttgga tgctggccct gaggacacgt gcccatcagc agaggagcca aggctgaacg
                                                                     2340
tecaggteae etecaegeee gtgategtga tgegegggge tgetggeetg cagegggaga
                                                                     2400
tccaggaggg tgcctactcc gggagctgct accatcgaga tggcttacgg ctgagtatac
                                                                     2460
agtttgaggt gaggcgggtg gagctccagg gccccacacc tctgttctgc tgctggctgg
                                                                     2520
```

```
tgaaagacct cctccacagc caacgcgact cagccgccag gacccgcctq ttccttqcca
                                                                     2580
geotgeoogg etecacecae tetacegotg etgageteae eggacecage etggtggaag
                                                                     2640
tgeteagage cagaccetgg tttgaggage cececaagge tgtggaactg gaggggttgg
                                                                     2700
cggcctgtga gggcgagtac tcccaaaagt acagtaccat gagcccgctg ggcaqtgggg
                                                                     2760
ccttcggctt cgtgtggact gctgtggaca aggaaaaaaa caaggaggtg gtgqtqaaqt
                                                                     2820
ttattaagaa ggagaaggtc ttggaggatt gttggattga ggatcccaaa cttgggaaag
                                                                     2880
ttactttaga gatcgcaatt ctatccaggg tggagcacgc caatatcatc aaggtattgg
                                                                     2940
atatatttga aaaccaaggg ttottocago ttgtgatgga gaagcacggo tocggootag
                                                                     3000
acctettege ttteategae egecaececa ggetggatga geceetggeg agetacatet
                                                                     3060
tccgacaagt gagagcaggg ccagagccgt ctagtgtcag cagtgggata cctgcgcttg
                                                                     3120
aaggacatca tccaccgtga catcaaggat gagaacatcg tgatcgccga ggacttcaca
                                                                     3180
atcaagetga tagaetttgg eteggeegee taettggaaa ggggaaaatt attttataet
                                                                     3240
ttttgtggga ccatcgagta ctgtgcaccg gaagttctca tggggaatcc ctacagaggg
                                                                     3300
ccggagctgg agatgtggtc tctgggagtc actctgtaca cgctggtctt tgaggagaac
                                                                     3360
cccttctgtg agctggagga gaccgtggag gctgccatac acccgccata cctggtgtcc
                                                                     3420
aaagaactca tgagccttgt gtctgggctg ctgcagccag tccctgagag acgcaccacc
                                                                     3480
ttggagaagc tggtgacaga cccgtgggta acacagcctg tgaatcttqc tqactataca
                                                                     3540
tgggaagagg tgtttcgagt aaacaagcca gaaagtggag ttctgtccgc tgcgagcctg
                                                                     3600
gagatgggga acaggagcct gagtgatgtg gcccaggctc aggagctttg tgggggcccc
                                                                     3660
gttccaggcg aggctcctaa tggccaaggc tgtttgcatc ccgggggatcc ccgtctgctg
                                                                     3720
accagetaaa caccaattte tteetgettt tetecaettg gtttggaaaa teacacagtt
                                                                     3780
ttcaggctcc atctgtttgg agaaaataca ttctgaagca tccccaattc accttctaaa
                                                                     3840
aactcatgtg caggtttgat aaacaccaga acagaagaca gtgatgctgt attattttag
                                                                     3900
atttattaca tagattigga attcactitt ticatgacci agaaaaaaac attccagtgt
                                                                     3960
tcaactgttt tatattatta aagggctttt aatttgtgaa cttctgaagg catgagtgtt
                                                                    4020
ttctctttct acttttgtat atgtgcatgt tttgtttcct ctgacttggt atatgctcat
                                                                     4080
ctgagtgacg gatatgtgaa atttgtagaa ctggttagtc aaatggccag actatttcat
                                                                     4140
taatttattt cotcaaatgo ttttcaaatt aaagcacctt tgttagtaaa cagttaa
                                                                     4197
```

```
<210> 3550
<211> 1239
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1240)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1169)...(931)
<223> similar to gi1710216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3550
agagtttttt tttttttaa tcagaatgac aaaggtaaag cagtgtttag gaacataaat 60
ctgacaggtg getegecagg tcacttggag ccaggatagg caggagtagc tggccagaga 120
cgagcagccc tgaaaactgt tcctgccctg gcctcacctc gtcaccacgt ctgctgtgga 180
aagggctgcg acctggaggc tgtgctgttg aacaggcaca tcgaggaggt ccaacacagc 240
```

```
gtcagaactc ccacgccctc ttctcagctc tgccccttgg tcagctgtca ggtgactccc
                                                                      300
aggcagagtc cgttttgagg ctcctgggac tggaatacgg gaccagcctg agttgctgtc
                                                                      360
agtcacgtcg caggagaaag gactggcaaa ggctcatggc cccttgaaat tctgttcctt
                                                                      420
ctaggeettt cetaagaage ttgtggeett eteaaettgg attgacegga eeegetggge
                                                                      480
caggaacacc tgggccatgc tcgccatctt catcctggtg atggcaaatg tcgtggacat
                                                                      540
ggtgagetee tgetgteett gttgaaggga egeceetgtt eteagtggag aagggettet
                                                                      600
gtttgggtca cacaagcagt ttctcagtcc atccctccac cgtcatgtag ctttggagtg
                                                                      660
getettaggt teccaaacae ateateecea eetagtggaa ggagtettgt eeetgteate
                                                                      720
cagggagcct ctgggatgga cttgtttcct tgaagctcct ctcccagagt ccgagagcac
                                                                      780
agttccatgt gcccaggcct gtgctaggta ccttatgtat gttgattcat ttaatctgtg
                                                                      840
aaaaagteet gageagttgt accagtatet geagttteat agggagaaac taacteteaa
                                                                      900
aaagggtaat tggttgggcg cggtagctca cgcctgtaat cccagcactt tgggaggcca
                                                                      960
aggtgggcgg atcacgaggt caggagttcg aaaccagcct ggccaacatg gtgaaaccc
                                                                     1020
atctgtacta aaaatacaaa aattagccag gcatggtggt gcacacctgt aatcccagct
                                                                     1080
acttgggagg ctgaagcagg agaatcgctt gaacccagga ggcggaggtt gcagtgagcc
                                                                     1140
gagattgage egetgeacte cageetagge aacagacage aagacgaatt ceaccacact
                                                                     1200
gantagggat ctcgaaaggg nctcgaanng gcatctcca
                                                                     1239
```

```
<210> 3551
<211> 1587
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(783)
<223> similar to gi4210354 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3551
atgaggatgg aggccgggga ggcagcgccg ccggcggggg cgggcggccg cgccgcaggc
                                                                       60
ggctggggca agtgggtgcg gctcaacgtg gggggcacgg tgttcctgac cacccggcag
                                                                      120
acgctgtgcc gcgagcagaa gtccttcctc agccgcctgt gccaggggga agagctgcag
                                                                      180
teggaceggg atgagacegg ggeetacete attgacegtg accecaceta ettegggeee
                                                                      240
atcctgaact teeteeggea tggeaagetg gtgetggaea aggaeatgge tgaggagggg
                                                                      300
gtcctggagg aagccgagtt ctacaacatc ggcccgctga tccgcatcat caaagaccgg
                                                                      360
atggaagaga aggactacac ggtcacccag gtcccaccca agcatgtgta ccgcgtgctg
                                                                      420
cagtgccagg aggaggaget caegeaaatg gtetecaeea tgtetgatgg etggegette
                                                                      480
gagcagctgg tgaacatcgg ctcctcctac aactacggca gcgaggacca ggcagagttc
                                                                      540
ctgtgtgtgg tgtccaagga gctccacagc accccaaacg ggctgagctc agagtccagc
                                                                      600
cgcaaaacca agagcacgga ggagcagctg gaggagcagc agcagcagga ggaggaggtg
                                                                      660
gaggaggtgg aggtggaaca ggtgcaggtg gaggcagatg cacaggagaa agctgttaca
                                                                      720
agecagagge acceggatgt gaggececag atcaceteca gggaettggg gtteccatet
                                                                      780
gaaatccttt atttttgtac catggggtgg gccccgggcc tgagaaggaa gaagcaccct
                                                                      840
ctccccggcc tectctgtet gcacccgtgg ggctgtgact tactcctgcc tccaggggcg
                                                                      900
gggcggggcc cccctgggac ctcttaaggc ccaaggtggg ccccaggacc tctgggcaga
                                                                      960
gtggactgct catggcagat gtgtggcaat gtctggctgt gtctctccgg cacctgcgtc
                                                                     1020
ccctctcccg ggctcccctg ctgcatggtg gatgtgctcc ttcctggccc ggtcacattg
                                                                     1080
ceteettgag cettagteca gggggteact ceteceacce cacetacete acagggttgt
                                                                     1140
tgtgagggtg cacagaggag caaagtccct gaaggccctc aggcagtata taggggccgc
                                                                     1200
```

```
ccaccttcag ctgcctggg atgggaagga cccagccga cccctgggca taacactgtg 1260 tttgcaaatg gagattcagg tattggggat gcaggttgtg gggagctggc ctggcagagt 1320 aggggtagtt ggcttggcct tctctttggt gatcccaccc ccagccattt gcattgctgg 1380 cccagcgcct ggcctggggg gcggggagag gcagcagaag gggctgggca gggggggtgg 1440 aggactcagg aactgcccgg ggagagtggg tatggcggct gagccagggg ccctcctgtg 1500 tttgacttcc cgggatggt ccttgcttct cagctgtgtc cgaccccacc atgtaataaa 1560 acccaaagga acagcccaa aaaaaaa
```

```
<210> 3552
<211> 4367
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4368)...(707)
<223> similar to gi4240217 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3552 ttttttttt ttgtgcaaga tttaataaaa aacaaacaaa aataggaaat ggttgctttc 60 aaaaatttcc ccaggttgtg aaaaggtttg ccaacgactc tcagggggtg tggttctaag 120 ctgcatcaag tgaaacaaat acaaaatgct gtccctcctc cctgggctcg gaaggcagtg 180 cactttctcc ctcttaacag cccagactag cgggtgagga gtcagtgctg tgaccccagg 240 gccaagctgg agtgtccgca tagctttttc tctgaccagt ggggattcca tctaccttga 300 ggcgtgctgg cctgggcccc gtttccacac cagcacatgg tgagacaggg tagcttatca 360 acaggetget gggeettaat actgacagtg agtgttggge egggteacag ecaggggaaa 420 ggacttaaca cagattgccc tcccaagccc ccactggctg ggcctaattt taggattacc 480 acgggaaaaa aagctttgat gaaagacaac aggaagtcaa cacagcagag agtggtgtgg 540 acaacccaga agccagcctc acgcattcca tgcccacagt taacgatgac aacaacagca 600 ataataataa taataataaa acaaaggtac aggtgaaaag cagcgcttgg ggtgtgctgc 660 tgcaagctgg ggaaggcgcg tgctcaactt ggatgggaca cacctagtct ttcttcaagt 720 ccctggattc aaagagcttc aaccgttctt gcaccgtcag gccttccttc agactcttgg 780 acctgatgtt tetgagttge egggtgaeae aggatetgte tttetteaag aagteagggt 840 tgcttttaga tttcattata tcatatccgg acaccgtggc actgtcaggg gacttctccc 900 ccagtgette egitgeagee tigagetget cetteaacet getgatgtea cagteageet 960 tageettege gatgetgage tetgtgtaga tgtetttgta ettgteaett geataettet 1020 tgtcccgcag tgccgtctgc agctcatcct tgagggagct aatctcctgt ttcaggtact 1080 gtatttccga ttcctttacc cgcaataaga cctctagttc ataggcatcc ttgccctgtg 1140 caaggggtga cccagtggcc tccccaccgc cgtccccaat caagcaacgt ccgcaaccgt 1200 gtgatetetg cagecaggeg gttgtteage teetggttgt gggeattgag eteetggtte 1260 teaegetgge actgeegeag ggeetgeege teggeeteea gegeetggge cagatgggea 1320 ttetecagge aettetgega gtactgetee gagaggaeet ccaagtteea egetgeaeeg 1380 actgeagete eeteeaggta etggegeege agggeeteaa acateegaag ttgaegetge 1440 tgatctggga ccgctggctc ttctcccagt cccgctccat ttcctcccgg tgggcgttct 1500 tcatggette gatggetgag atggtggeeg etgteteete ggetaggagg eggtetttet 1560 cttctcgaag tttctctagc tcccgctggt gctgcctctg gagatcttca atcttccttc 1620 tggtgcgttt cttccattgc tgcaaaccct cgctcgcacg tggccttaag gctctccaag 1680 teeetetggt aetteteaeg eagtgtggee gegtegeeet eeaggteett gtgteeeage 1740 tectecegea tgacatecat etgggeetee ageteetgga tgegeteeet cageceegte 1800

```
atggagtcag cetetecetg ggtggeetge cagttggggg caggggetgg cagggeettg
                                                                     1860
999tgtggcc cctggtggag gcagagggtg tcctgaaggc acctcaggct ctgcgagtag
                                                                     1920
tgctcctgca gggtcctcag ctcctcctcg tggatcgtct gcagctcccg gaccttgagc
                                                                     1980
tggaacctgt cctccagggt ctgtatctgc tcaccatgat gcctctccat gtcctgcctg
                                                                     2040
tetetgaceg aggeatecag etggeteagg acceggetge geteageetg eagtgtgete
                                                                     2100
teggteetgg teagetgete caccacacae egaateteet ceteatacet geeeegeagg
                                                                     2160
gtgaacatgc tcatgctgtg cttgctctct gcatcctcca gacactgctg ctgatggtct
                                                                     2220
agetgggegg cettggeett gagetetgea tteteeettt caacaatgge gateacatee
                                                                     2280
aggtactege tettetgett geggagaage teeteataet.ceteeeteag ggeeeggget
                                                                     2340
gcctgtgcct gctctgagca ggagggctcc cgggtttgcc aggactcctt gcagagctgg
                                                                     2400
ageteettet catattetag ceggattetg caggaegeat ageaaacetg ggeetgaata
                                                                     2460
atggcatcct gaaccaacaa tgaagaatac tgaccgaggc ctcccaaaca agtgttatac
                                                                     2520
gagagactet gggacacetg gagaagette tggcaatete teagegatte cacaggtqqe
                                                                     2580
agagatggta aggcagccgc tatctcctct aagaggctgg ccttctcctt cagctgctgg
                                                                     2640
gcaageteet eetgaatage aacaaaggee eeagggetet ggteagaeae ategaaggge
                                                                     2700
tectgagage tgtetgagte teggeecagg aetteteeta aggggeteag gteccaggae
                                                                     2760
agetgaacae catetteatg geeegetgga ageetgaggg ettecaagae etgetgeate
                                                                     2820
actettteaa agtetggggt ttggtagget cecaggattt cecteageag geatttgtge
                                                                     2880
tgccgcaggg ccgtctgggt gccccgcagg gtctcctgga tgctctgtag cctgcggtgg
                                                                     2940
aacgactccc tcactgactg tgtggcaaag ctgagctctg ccctgaccca tgtggcattg
                                                                     3000
gccaggatgg gggccaggcc ctgtgggatg ctttgctgcc cgtctcctga ggcaccgact
                                                                     3060
geeteteete ecagtgteee caagtgette etcagagaet caacetgget ecagaactea
                                                                     3120
ccatccacta ggaccttcct ggcccaggtg tctacggggg ccccagcaga ttccatcggt
                                                                     3180
ggctgtcctg accaagaaat ctcatggagc attcgggaga catctgatgt tgtgttcttc
                                                                     3240
agggaatctg ctatctggct gatcagcgag gcctccagag caatctggtc agaaagaagc
                                                                     3300
ctcacctgct cctgctctgt caactcagac tgggagcact gctgcaggga ggcaggcttc
                                                                     3360
ccattetect eggtgecace tgtetecage tgtgeaeggg ceeegecatg ggetgggee
                                                                     3420
ggccagtgct gcagggcttg gatggcgctg acgagtgcac tctccacact ggccagggag
                                                                     3480
gctgcgcgtg cgtcctgctc atcctcctgg ctggccctag gcagagatct cagttgttct
                                                                     3540
cggcaattit ccaggcacat cagggcctga ctattcttga cctggaagtc cccaagctct
                                                                     3600
ccaacatgcc cttcaaccct cctgccctc tcctgcctct cctgctccag ctgggaggcc
                                                                     3660
agtgcgccaa cctggagcag gctggcgcgg agctgctcac gcagctgggc ctcggtgccc
                                                                     3720
geceactggt ggtgcagtge gagcagtgee teacggetet gaecetgetg getetecage
                                                                     3780
ctcacggtca cgtctttgag cttttcctct gtgacgtaga gcttggtctc cagggagtgg
                                                                     3840
atgatggaga ggtacgtgtc agagtcgcca gttgcaggca gtacactggg tgcaggctct
                                                                     000
gaggacatgc tttcttccga gggtgaccgg tcctggctgg tgtcggaaga tgtgctgctg
                                                                     3960
gtocaggtet teteagacee tteggggtga atgtatettt ggcaetggat tgtggagaac
                                                                     4020
cggattettt geettttaac accaggtgee eettggtega gtttggetgt geeetgetga
                                                                     4080
tggccctccc tgtcaagcac ttccactgac tttgggggca ccatgctgtc ttccctactg
                                                                     4140
gggctgccat caccgtacte ttececcgga ggagececca ggtectegte etcatecteg
                                                                     4200
agcettgtgt gtgggaggee tagaggtgee etagtggett ggaetggttg geetgggage
                                                                     4260
aaagtgccat ccctttctgt ctcttcaggg gtactccgtg gctcttccat gtcctttgga
                                                                     4320
gattcacttg caaatttcct taaaatctct tcttttgcct ggagctt
                                                                     4367
```

```
<210> 3553
<211> 1919
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(940)
<223> similar to gi5748546 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3553
atggagccag gcagcgtgga gaacctgtcc atcgtgtacc ggagccgcga cttcctggtg
                                                                       60
gtcaacaagc actgggacgt tcgcattgac agcaaggcgt ggcgggagac tctgaccctg
                                                                      120
cagaagcagc tgcggtaccg ctttcccgag ctggccgacc ctgacacctg ctacgggttc
                                                                      180
aggttetgee accagetgga tttetecaee ageggggege tgtgegtgge eetaaacaag
                                                                      240
gcagccgccg gcagcgcgta caggtgcttc aaggagcggc gcgtgaccaa ggcttacctg
                                                                      300
gcattgctgc gggggcacat ccaggagagc cgggtaacca tcagccatgc cattggcagg
                                                                      360
aacagcacgg agggccgggc ccacaccatg tgcatcgagg gctcgcaggg ttgtqaqaac
                                                                      420
ccaaagccaa gcctcacaga tctcgtggtt ctggaacacg ggctgtacgc aggcgatcct
                                                                      480
gtetecaaag tgetgetgaa geegeteaeg ggeeggaeae accagetgeg egtegeaetg
                                                                      540
cagtgccctg ggccaccccg tggtgggcga cctgacctac ggagaagtct cgggccggga
                                                                      600
ggaccggccg ttcagaatga tgctgcacgc tttctacctg cgcatcccca cggacaccqa
                                                                      660
gtgtgtggag gtctgcacgc ctgacccctt cctgccctcc ctggatgcct gctggagccc
                                                                      720
ccacacactg ctgcagtcgc tggaccagct cgtgcaggcc ttacgggcca cccccgaccc
                                                                      780
tgaccccgag gataggggcc ccaggccagg cagcccctcc gcactcctgc ctgggcccgg
                                                                      840
eeggeeteet ceacececaa ceaageeeee tgagaetgag geacageggg geeeetgeet
                                                                      900
gcagtggctg tcggagtgga cgctggaacc ggacagctga gagccgtggg gctggggcag
                                                                      960
ggggtgtcag ctgcacagcg gagactctag ggagatgggc gagcgagcgt ctgctcactg
                                                                     1020
getetgggge etegaggtge caggeageat caggeecact gggttgeece ggecaggeet
                                                                     1080
gcgaggaagg gctgaggtgg ggccggcagg gggcgccagg cagccgtgat cacaggtgac
                                                                     1140
gaccgcaccg cggccgtggg actgatgcgg gatcccgagg gccttcctgc ccacatgccc
                                                                     1200
cgggagaaac cgaggcccct ccctcctct ggaacagctt ccggctctca agcgtcaccc
                                                                     1260
caggggcgtc agttttacgg actcaaggtc acctcaggaa gaggcagggc caggttttqq
                                                                     1320
gataggettt geeteeagga tgggetgete etgggeetgg tgagetaetg eeceeaacet
                                                                     1380
accetetaga ggggetggga agggeegtte tgggeteace tggeetggga gacceatetg
                                                                     1440
gtecetgegt cetetgeece teactgetet gtgcagatec tgtegeecte agetgeetee
                                                                     1500
tecegagace taatggteee tgetgggete gagtetgeag geeeggetge gtgtgeettg
                                                                     1560
gesteastgt accagtggtt coststetgs eeggattetg ageteagtgt ggtgtttggt
                                                                     1620
gcacaggggt tggtcagggg ccatggccaa ggccctgcca cgcacgccca tccctcagat
                                                                     1680
ccactgtgag caccaacctg ctgcagtctc ttgggcccct gctggcagct ctgccacgtc
                                                                     1740
accepted tegeteceae acagecate atteteacte tegetecege accecagett
                                                                     1800
gggagetgtg ggtetgeeag gteecacete etetgteece catgecacaa cetgggetee
                                                                     1860
tggctacagc agggctccag ggactccaaa taaatgttca gtgactggca aaaaaaaaa
                                                                     1919
```

```
<210> 3554
<211> 601
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (42)...(506)
<223> similar to gi2827495 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 3554 gegeggegeg ceageaacae tgeacgeagg tgegeageeg geggeteatg aaggagetge 60 aggacatege gegeettage gacegettea teteegtgga getggtggae gagageetgt 120 tegactggaa egtgaagetg caccaggtgg acaaggacte ggtgetgtgg caggacatga 180 aggagaccaa caccgagtto atoctgotoa acotoacott coccgacaac ttoccottot 240 cgccgccctt catgcgggtg ctcagcccgc gcctggagaa cggctacgtg ctggacggcg 300 gègecatetg catggagetg etéacgeege geggetggte cagegeetae acegtggagg 360 ccgtcatgcg ccagttcgca gccagcctgg tcaagggcca gggacggatc tgtagaaaag 420 ctggcaaatc aaaaaagtcc ttcagtcgca aggaagctga agctaccttt aagagtttgg 480 gtgaagacgc atgaaaaata tggttggggt caccccgccc gtgttcccga cggctgatgt 540 ctgccacgtg cagtagacgg ttcgagcgcc tgtccacaca cacaccagta ccctgacatc 600 601

```
<210> 3555
<211> 3479
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3389)
<223> similar to gi4754909 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3555
atgaactete ecaacgagte ggatgggatg teaggteggg aaccateett ggaaateetg
                                                                       60
ccgcggactt ctctgcacag catccctgtg acagtggagg tgaagccggt gctgccaaga
                                                                      120
gccatgccca gttccatggg gggtgggggt ggaggcagcc ccagccctgt ggagctacgg
                                                                      180
ggggctctgg tgggctctgt ggaccccaca ctgcgggagc agcaactgca gcaggagctc
                                                                      240
ctggcgctca agcagcagca gcagctgcag aagcagctcc tgttcgctga gttccagaaa
                                                                      300
cagcatgacc acctgacaag gcagcatgag gtccagctgc agaagcacct caagcagcag
                                                                      360
caggagatgc tggcagccaa gcagcagcag gagatgctgg cagccaagcg gcagcaggag
                                                                      420
ctggagcagc agcggcagcg ggagcagcag cggcaggaag agctggagaa gcagcggctg
                                                                      480
gagcagcage tgeteateet geggaacaag gagaagagea aagagagtge cattgecage
                                                                      540
actgaggtaa agctgagget ccaggaatte etettgtega agtcaaagga gcccacacca
                                                                      600
ggcggcctca accattccct cccacagcac cccaaatgct ggggagccca ccatgcttct
                                                                      660
ttggaccaga gttcccctcc ccagagcggc cccctggga cgcctccctc ctacaaactg
                                                                      720
cetttgeetg ggeeetaega cagtegagae gaetteeeee teegeaaaae ageetetgaa
                                                                      780
cccaacttga aagtgcgttc aaggctaaaa cagaaggtgg ctgagcggag aagcagtccc
                                                                      840
ctcctgcgtc gcaaggatgg gactgttatt agcaccttta agaagagagc tgttgagatc
                                                                      900
acaggtgccg ggcctggggc gtcgtccgtg tgtaacagcg cacccggctc cggccccagc
                                                                      960
teteceaaca geteceacag caccateggt gagaatgget ttactggete agtececaac
                                                                     1020
atecceactg agatgetece teageacega gecetecete tggacagete ecceaaceag.
                                                                     1080
tteageetet acaegtetee ttetetgeee aacateteee tagggetgea ggeeaeggte
                                                                     1140
actgtcacca actcacacct cactgcctcc ccgaagctgt cgacacagca ggaggccgag
                                                                     1200
aggcaggccc tccagtccct gcggcagggt ggcacgctga ccggcaagtt catgagcaca
                                                                     1260
tectetatte etggetgeet getgggegtg geactggagg gegacgggag eccecaeggg
                                                                     1320
catgeeteec tgetgeagea tgtgetgttg etggageagg eeeggeagea gageaceete
                                                                     1380
attgctgtgc cactccacgg gcagtcccca ctagtgacgg gtgaacgtgt ggccaccagc
                                                                     1440
atgcggacgg taggcaaget eccgcggcat eggeeeetga geegeactea gteeteaceg
                                                                     1500
```

```
ctgccgcaga gtccccaggc cctgcagcag ctggtcatgc aacaacagca ccagcagttc
                                                                     1560
ctggagaagc agaagcagca gcagctacag ctgggcaaga tcctcaccaa gacaggggag
                                                                     1620
ctgcccagge agcccaccac ccaccctgag gagacagagg aggagetgac ggagcagcag
                                                                     1680
_gaggtettge tgggggaggg agecetgace atgeeeeggg agggeteeae agagagtgag
                                                                     1740
agcacacagg aagacctgga ggaggaggac gaggaagacg atggggagga ggaggaggat
                                                                     1800
tgcatccagg ttaaggacga ggagggcgag agtggtgctg aggaggggcc cgacttggag
                                                                     1860
gageetggtg etggatacaa aaaactgtte teagatgeee ageegetgea geetttgeag
                                                                     1920
gtgtaccagg cgcccctcag cctggccact gtgccccacc aggccctggg ccgtacccag
                                                                     1980
tecteceetg etgeceetgg gggeatgaag ageceeeag accageeegt caageacete
                                                                     2040
ttcaccacag gtgtggtcta cgacacgttc atgctaaagc accagtgcat gtgcgggaac
                                                                     2100
acacacgtgc accetgagea tgetggeegg atecagagea tetggteeeg getgeaggag
                                                                     2160
acaggeetge ttageaagtg egageggate egaggtegea aageeaeget agatgagate
                                                                     2220
cagacagtgc actetgaata ccacaceetg etetatggga ccagteeect caaceggeag
                                                                     2280
aagctagaca gcaagaagtt gctcggcccc atcagccaga agatgtatgc tgtgctgcct
                                                                     2340
tgtgggggca tcggggtgga cagtgacacc gtgtggaatg agatgcactc ctccagtgct
                                                                     2400
gtgcgcatgg cagtgggctg cctgctggag ctggccttca aggtggctgc aggagagctc
                                                                     2460
aagaatggat ttgccatcat ccggccccca ggacaccacg ccgaggaatc cacagccatg
                                                                     2520
ggattetget tetteaacte tgtagecate acegeaaaac teccaeagea gaagttgaae
                                                                     2580
gtgggcaagg tecteategt ggaetgggae atteaceatg geaatggeae eeageaggeg
                                                                     2640
ttctacaatg acceptetgt getetacate tetetgeate getatgacaa egggaactte
                                                                     2700
tttccaggct ctggggctcc tgaagaggtt ggtggaggac caggcgtggg gtacaatgtg
                                                                     2760
aacgtggcat ggacaggagg tgtggacccc cccattggag acgtggagta ccttacagcc
                                                                     2820
ttcagcttga gccatccctt tgcaggacag tggtgatgcc cattgcccac gagttctcac
                                                                     2880
ctgatgtggt cctagtctcc gccgggtttg atgctgttga aggacatctg tctcctctgg
                                                                     2940
gtggctactc tgtcaccgcc agatgttttg gccacttgac caggcagctg atgaccctgg
                                                                     3000
cagggggccg ggtggtgctg gccctggagg gaggccatga cttgaccgcc atctgtgatg
                                                                    .3060
cctctgaggc ttgtgtctcg gctctgctca gtgtagagct gcagcccttg gatgaggcag
                                                                     3120
tettgeagea aaageeeaac ateaaegeag tggeeaeget agagaaagte ategagatee
                                                                     3180
agagcaaaca ctggagctgt gtgcagaagt tcgccgctgg tctgggccgg tccctqcgaq
                                                                     3240
aggcccaagc aggtgagacc gaggaggccg agactgtgag cgccatggcc ttgctgtcgg
                                                                     3300
tgggggccga gcaggcccag gctgcggcag cccgggaaca cagccccagg ccggcagagg
                                                                     3360
ageceatgga geaggageet geeetgtgae geeeeggeee eeateeetet gggetteaee
                                                                     3420
attgtgattt tgtttatttt ttctattaaa aacaaaaagt cacacattca aaaaaaaaa
                                                                     3479
```

```
<210> 3556
<211> 740
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (741)...(261)
<223> similar to gil706967 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3556

ttttttttt tttaattaac aaacctttt tttttttta ttggagatag gaaacagtga 60
agtcccacat accatacct acaagacaca aggtgcgcag acgagccttg gctatgtacc 120
ggcgctgcag gaagaggctg tccgccgggc ctgggctgct ccagctacgc ggggaggcgg 180
ccccattgca aagtgcagtt tctccgcgga ggtgggcggt gggtcagtgg gcagagggcc 240
```

```
atggtttcca tgttaaggga agcggacgtg catcttggtc tcaatgtcga tcccctgcca
                                                                      300
gatetteagg aagteetega aggtgateee etegtacaee tgateagget ceatetgeee
                                                                      360
catgcacacg ctggccgcct ccatcatggc cccgtcggcg atggagcgag cggactcctt
                                                                      420
ctcgatgtga gggtttcccg acagcagete etegaceaea tttegatatt ettecaqaqt
                                                                      480
gatgcggccg tcgctgtccg agtcgtacat gtggaacaga aatctcagct tctccttccg
                                                                      540
ggacagetee acctgtteet egtecatggt ggtgtegatg ggeeggaagt aggacatgat
                                                                      600
ggtcaggaag tcctcgaaat tgatctcatc agccaggcca ctgggtccct tgcgcaggtt
                                                                      660
cctgttgtcg aaaagccacg aaaaattttg aattcgaggg ggtttacccc caagtgcggg
                                                                      720
gaattgttta agttcttcct
                                                                      740
```

```
<210> 3557
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(996)
<223> similar to gi184240 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3557 geggeegeeg gegggeeggg eeegegeada gegeeegeat gtacaadatg atggagaegg 60 agetgaagee geegggeeg cageaaaett eggggggegg eggeggeaae tecacegegg 120 cggcggccgg cggcaaccag aaaaacagcc cggaccgcgt caagcggccc atgaatgcct 180 tcatggtgtg gtcccgcggg cagcggcgca agatggccca ggagaacccc aagatgcaca 240 actoggagat cagcaagogo otgggogoog agtggaaact tttgtoggag acggagaago 300 ggccgttcat cgacgaggct aagcggctgc gagcgctgca catgaaggag cacccggatt 360 ataaataccg gccccggcgg aaaaccaaga cgctcatgaa gaaggataag tacacgctgc 420 ccggcgggct gctggccccc ggcggcaata gcatggcgag cggggtcggg gtgggcgccg 480 gcctgggcgc gggcgtgaac cagcgcatgg acagttacgc gcacatgaac ggctggagca 540 acggcageta cagcatgatg caggaccage tgggctacce gcagcacceg ggcctcaatg 600 cgcacggcgc agcgcagatg cagcccatgc accgctacga cgtgagcgcc ctgcagtaca 660 actocatgae cagetegeag acetacatga aeggettege eccacetaca geatgteeta 720 ctegeageag ggeacecetg geatggetee tggeteeaat gggtteggtg gteaagteeg 780 aggecagete cagececeet gtggttaeet etteeteeca etecagggeg eeetgecagg 840 ccggggacet ccgggacatg atcagcatgt atctccccgg cgccgaggtg ccggaacccg 900 ccgccccag cagacttcac atgtcccagc actaccagag cggcccggtg cccggcacgg 960 ccattaacgg cacactgccc ctctcacaca tgtgagggcc ggacagcgaa ctggaggggg 1020 gagaaatttt caaagaaaaa cgagggaaat gggaggggtg caaaagagga gagtaagaaa 1080 cagcatggag aaaacccggt acgctcaaaa aaaaaa 1116

```
<210> 3558
<211> 2990
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (1)...(2662)
<223> similar to gi3043726 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 3558

cggcgcgcgg gcagcgtgaa gcgaggcgag gcaaggcttt tcggacccac ggagcgacag 60 agcgagcggc ccctacggcc gtcggcggcc cggcggcccg agatgttatc tgggaagaag 120 gcggcagccg cggcggcggc ggctgcagcg gcagcaaccg ggacggaggc tggccctggg 180 acagcaggcg gctccgagaa cgggtctgag gtggccgcgc agcccgcggg cctgtcgggc 240 ccagccgagg tcgggccggg ggcggtgggg gagcgcacac cccgcaagaa agagcctccg 300 cgggcctcgc cccccggggg cctggcggaa ccgccggggt ccgcagggcc tcaggccggc 360 cctactgtcg tgcctgggtc tgcgaccccc atggaaactg gaatagcaga gactccggag 420 gggccgtcgg accagccggc gcaagcgggc gaaggtagag tacagagaga tggatgaaag 480 cttggccaac ctctcagaag atgagtatta ttcagaagaa gagagaaatg ccaaagcaga 540 gaaggaaaag aagcttcccc caccaccccc tcaagcccca cctgaggaag aaaatgaaag 600 tgagcctgaa gaaccatcgg gtgtggaggg cgcagctttc cagagccgac ttcctcatga 660 ccggatgact tctcaagaag cagcctgttt tccagatatt atcagtggac cacaacagac 720 ccagaaggtt tttctttca ttagaaaccg cacactgcag ttgtggttgg ataatccaaa 780 gattcagctg acatttgagg ctactctcca acaattagaa gcaccttata acagtgatac 840 tgtgcttgtc caccgagttc acagttattt agagcgtcat ggtcttatca acttcggcat 900 ctataagagg ataaaacccc taccaactaa aaagacagga aaggtaatta ttataggctc 960 tggggtctca ggcttggcag cagctcgaca gttacaaagt tttggaatgg atgtcacact 1020 tttggaagee agggategtg tgggtggaeg agttgeeaca tttegeaaag gaaactatgt 1080 agctgatett ggagecatgg tggtaacagg tettggaggg aateetatgg etgtggteag 1140 caaacaagta aatatggaac tggccaagat caagcaaaaa tgcccacttt atgaagccaa 1200 cggacaagct gttcctaaag agaaagatga aatggtagag caagagttta accggttgct 1260 agaagetaca tettaeetta gteateaaet agaetteaat gteeteaata ataageetgt 1320 gtcccttggc caggcattgg aagttgtcat tcagttacaa gagaagcatg tcaaagatga 1380 gcagattgaa cattggaaga agatagtgaa aactcaggaa gaattgaaag aacttcttaa 1440 taagatggta aatttgaaag agaaaattaa agaactccat cagcaataca aagaagcatc 1500 tgaagtaaag ccacccagag atattactgc cgagttctta gtgaaaagca aacacaggga 1560 tetgacegee etatgeaagg aatatgatga attagetgaa acacaaggaa agetagaaga 1620 aaaacttcag gagttggaag cgaatccccc aagtgatgta tatctctcat caagagacag 1680 acaaatactt gattggcatt ttgcaaatct tgaatttgct aatgccacac ctctctcaac 1740 teteteeett aageaetggg ateaggatga tgaetttgag tteaetggea geeaectgae 1800 agtaaggaat ggctactcgt gtgtgcctgt ggctttagca gaaggcctag acattaaact 1860 gaatacagca gtgcgacagg ttcgctacac ggcttcagga tgtgaagtga tagctgtgaa 1920 taccogctcc acgagtcaaa cctttattta taaatgcgac gcagttctct gtacccttcc 1980 cctgggtgtg ctgaagcagc agccaccagc cgttcagttt gtgccacctc tccctgagtg 2040 gaaaacatct gcagtccaaa ggatgggatt tggcaacctt aacaaggtgg tgttgtgttt 2100 tgatcgggtg ttctgggatc caagtgtcaa tttgttcggg catgttggca gtacgactgc 2160 cagcaggggt gagetettée tettetggaa cetetataaa getecaatae tgttggeact 2220 agtggcagga gaagctgctg gtatcatgga aaacataagt gacgatgtga ttgttggccg 2280 atgeetggee atteteaaag ggatttttgg tageagtgea gtaceteage ecaaagaaae 2340 tgtggtgtct cgttggcgtg ctgatccctg ggctcggggc tcttattcct atgttgctgc 2400 aggatcatct ggaaatgact atgatttaat ggctcagcca atcactcctg gcccctcgat 2460 tecaggigee ecacageega ticcaegaet ettetitgeg ggagaacata egateegtaa 2520 ctacccagcc acagtgcatg gtgctctgct gagtgggctg cgagaagcgg gaagaattgc 2580 agaccagttt ttgggggcca tgtatacgct gcctcgccag gccacaccag gtgttcctgc 2640 acagcagtcc ccaagcatgt gagacagatg cattctaagg gaagaggccc atgtgcctgt 2700 ttctgccatg taaggaaggc tcttctagca atactagatc ccactgagaa aatccaccct 2760

```
<210> 3559
<211> 5906
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(5229)
<223> similar to gill36398 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3559 cggccgcgtc gacctgtgga ctattctgct tggaaggtca gctctgagag agctgagtca 60 gattgaggca gaactgaata aacattggcg gcgattgtta gaggggcttt cttactacaa 120 acctcccagt ccaagttcag ctgaaaaagt gaaagctaat aaagatgtag cttcaccatt 180 gaaggaactg ggtttaagaa tcagcaagtt tttgggtctt gatgaagaac agagtgtgca 240 gttactccag tgttacctgc aagaggacta caggggtact cgggactcag taaagacagt 300 actgcaagat gagaggcaga gccaggcctt aatcctgaag attgcagatt attattatga 360 agaaagaacc tgtattette gttgtgtett acacettete aettaettee aagatgaaag 420 acacccctat agggttgaat atgcagactg tgttgataaa ttggagaagg aactagtttc 480 aaaatacaga cagcagttcg aagagcttta taaaactgaa gcaccaactt gggagacaca 540 tggaaatete atgacagage gecaagtgte tegetggttt gttcagtgee ttegggaaca 600 gtccatgctg ctagaaatta ttttccttta ttatgcatac tttgagatgg cacccagtga 660 cttacttgta ttaaccaaga tgtttaaaga gcaaggattt ggtagtaggc agaccaatag 720 geacetggtg gatgagaeta tggateettt tgtagategg attggetaet teagtgeeet 780 catcctggtg gagggcatgg atatcgagtc cttgcataag tgtgctttgg atgacagaag 840 agaactgcat cagtttgcgc aggatgggct tatttgtcag gatatggact gtttaatgtt 900 gacctttggg gacattccac atcatgcccc agtgcttttg gcctgggctc tcctccgtca . 960 cactetgaac ccagaagaga caagcagtgt ggtccggaag ataggtggca cagccatcca 1020 gctgaatgtg tttcagtact tgacccgatt gctccagtcc cttgccagtg ggggaaatga 1080 ttgcaccacc agcactgcat gcatgtgtgt ctatggactg ctctctttcg ttctgacctc 1140 gttggagetg cacaccetgg gcaatcagca ggatataatt gatacagcat gtgaagtatt 1200 ggccgaccct tetettecgg aactgttetg gggaacagag ccaacttetg geettgggat 1260 cattetggae agtgtgtgtg gaatgtttee ceaeettete teeceaetee tgeaactget 1320 ccgagecetg gtatcaggga agtecacage caaaaaggtg tatagettet tggataagat 1380 gtctttctac aatgaacttt ataaacacaa gcctcatgat gtgatctccc atgaagatgg 1440 aactetttgg cggagacaaa cacccaaact cetttateee ettgggggte aaaccaacet 1500 tegeatacet caaggeactg tgggccaagt aatgttggat gatagggeat acetggtacg 1560 ctgggaatac tectatagea getggaeeet etttacetge gagattgaaa tgttgettea 1620 tgttgtttca actgcagatg tgattcagca ctgccagcga gtcaaaccca tcattgatct 1680 cgtccataag gtcatcagta cagacctgtc gatagcagac tgtctcctgc ccatcacatc 1740 tegeatetae atgetgetge ageggttaae gacagtgate tecceacetg tggatgteat 1800 tgcttcttgt gtcaactgct taactgtttt ggctgcccgc aatccagcaa aggtctggac 1860 tgatettegt cacacaggit tittaccatt tgtggcccat cetgteteca geetgagtea 1920 gatgattagt geggaaggga tgaatgetgg agggtaegga aacetettga tgaacagtga 1980

```
acageeteag ggegagtatg gggttaetat tgeetttetg egettgatea eeaceettgt
                                                                     2040
caaggggcaa cttggtagta cccagagcca aggacttgta ccctgtgtaa tgtttgtgct
                                                                     2100
gaaggagatg cttcccagct accataagtg gcgctacaac tctcatggag tgagggaaca
                                                                     2160
gattggttgc ctgatcttgg agctgattca tgcgatactg aacctgtgcc acgagacaga
                                                                     2220
cctgcacage agtcatacte, ccageetgca gtttetetge atetgcagee tggcatacae
                                                                     2280
agaagcagga cagacagtta tcaatatcat gggcattggc gtggacacca ttgacatggt
                                                                     2340
gatggctgct cagcctcgaa gtgatggggc agagggccag gggcagggcc agctgctgat
                                                                     2400
caagacagtg aaactggcat tctccgtcac caacaatgtt attcggctga aacctccttc
                                                                     2460
taatgtggtg tcccccctgg aacaggetet ctcacaacat ggtgeteatg gaaacaacet
                                                                     2520
cattgctgtt ctagccaaat acatctacca caaacatgac cctgctttgc cacgtcttgc
                                                                     2580
cattcagctg ctgaaacgtc tggccacggt ggccccaatg tcagtgtatg cttgtctggg
                                                                     2640
caatgatgcg gctgccattc gtgatgcctt cctgacccga ttgcagagca aaaattgagg
                                                                     2700
gacatgcgca tcaaaagtca tgattctagg agttcctcac tgttgcaagt agagacccag
                                                                     2760
ccaggcctca tcgaactgtt tctgaacctg gaagttaagg atggcaagtg atggctcaaa
                                                                     2820
ggaattcage ettgggatgt ggaagetgte tecatgeagt ggetgggage tgattgatte
                                                                     2880
ccaacagcaa gatcgatact ggtgcccacc cctgctgcat cgtgccgcca ttgccttttt
                                                                     2940
gcatgctctg tggcaggatc ggagggacag tgccatgctg gtcctccgaa ccaaacccaa
                                                                     3000
gttttgggaa aatttaacca gtccgctgtt tggaaccctt tctcctccct ctgaaacatc
                                                                     3060
agagcccagc atcctggaaa cctgtgccct aatcatgaag ataatttgct tggagatata
                                                                     3120
ctatgtagta aaggggtcat tagaccagcc attaaaggat acactgaaga aattttccat
                                                                     3180
cgagaaacgc tttgcctact ggtcagggta tgtcaagtca ttggcagttc acgtggccga
                                                                     3240
aacagaaggc agcagctgca cctccttgtt agagtaccag atgctggtgt ccgcctggag
                                                                     3300
gatgettete ateattgeca ceaeteatge agatataatg cacetgactg actetgtggt
                                                                     3360
gcgtcgccag ctctttcttg acgtgcttga tggaaccaaa gcattactcc tagttccagc
                                                                     3420
ctcagtgaac tgccttcgcc ttggctccat gaagtgcact ctgctgctta tcctcctccg
                                                                     3480
gcagtggaag agagagttag gttctgtgga tgaaatcctt ggacccttga cggagatcct
                                                                     3540
ggagggagtg ctgcaggccg accagcaact catggagaag accaaggcca aggtgttctc
                                                                     3600
agcattcatc acagtgttgc aaatgaagga gatgaaagta agtgacatcc cccagtactc
                                                                     3660
ccagctggtg ctgaatgtct gtgagaccct ccaagaggaa gtgattgcac tcttcgacca
                                                                     3.720
gacccgccac agtctggcat taggcagtgc cacagaggac aaggacagca tggagactga
                                                                     3780
cgactgttet cggteccgge acagggacca gegtgatggg gtgtgtgtec tgggeetgea
                                                                     3840
cctggccaag gagctgtgtg aggtagacga ggatggtgac tcctggctgc aggtaacccg
                                                                     3900
caggetecce atectaceca ecetecteae caetetagag gtgageette geatgaagea
                                                                     3960
gaacctgcat ttcactgagg ccacattgca tctgctcctc accctggctc gcactcagca
                                                                     4020
gggagccaca gcagtggctg gagctggcat cacccagagc atttgtttgc cccttctgag
                                                                     4080
tgtgtaccag ctgagcacca acggcacagc acagacacct agtgcctctc ggaagtccct
                                                                     4140
ggatgccccc tettggccag gagtctaccg cetgtccatg teectgatgg ageagetget
                                                                     4200
caaaactctg cgctacaact tcctgcctga ggccctggac ttcgtgggtg tccaccagga
                                                                     4260
geggaeetta eagtgeetea aegeagtgag gaeagtgeag agtetggeet geetggagga
                                                                     4320
ggcggaccac accgtgggtt ttattctgca gctctctaac ttcatgaagg agtggcactt
                                                                     4380
tracetgeet cagetratge gtgatatrea ggtcaacetg ggttacttgt gecaggcatg
                                                                     4440
tacctctttc ctgcacagtc gaaagatgct gcagcattac ttacagaaca aaaatgggga
                                                                     4500
tggcctcccc tcagctgttt gcccagcgag ttccagaggc caccgtctgc tgcttctgct
                                                                     4560
geceeteet eetecaagea gecegetget gacacagagg cateagagea geaggeettg
                                                                     4620
cacacagtee agtatggeet teteaagate etcageaaga egetggeage eetgegeeae
                                                                     4680
ttcaccccag atgtctgcca gattctgctg gatcagtccc tggaccttgc tgaatacaac
                                                                     4740
ttcctgtttg ccctgagctt taccactccc acctttgact ccgaagtggc cccctccttc
                                                                     4800
gggaccette tggccacagt gaatgtggcc etcaacatge ttggagaget ggacaagaaa
                                                                     4860
aaggageeee teacecagge agtggggete ageacacagg cagaagggae caggaegtta
                                                                     4920
aagteeetee tgatgtttae catggaaaac tgettetaee tgeteatete teaggegatg
                                                                     4980
cggtacctta gggacccggc tgtgcacccc cgggacaaac agcggatgaa gcaggagctc
                                                                     5040
agetetgagt tgageaeget getgteeage etetegeget aetteegeeg gggageeece
                                                                     5100
ageteceetg ceaetggtgt ceteceeteg eegeagggea agtecaeete tetetecaaa
                                                                     5160
gccagccctg agagtcagga gcctctgatc cagttggtgc aggcgtttgt ccggcatatg
                                                                     5220
caaagatagg gcagtgctgt tctgcccacc tacccctctc caccagccta cactgcaccc
                                                                     5280
tggctggcag gggtgctgct ggctgctagg gcctatacaa tggagggcac ctcctgtcac
                                                                     5340
ccccctcccg gagtagccac gactccagcc accacccact gacgttattt ttatactaga
                                                                     5400
```

```
tgaagaggtc aacagcaggc atggggagcc gagtcttctg tgctcaggtc ctcacgctgc
                                                                     5460
agacgcccc taaaggaact ttccttcctt tccagcattc cccacatgca ctgccggcca
                                                                     5520
ggggagaggc ggcagcccag cagagggctc tatgcacggg tttcaaacct gttttccaca
                                                                     5580
ctctgtcttt gcagttttgg taattctgtg gtctatttat acagatatta aaatcttgtt
                                                                     5640
tatagacage etgtgtgatg tttaacttca aageecaggg atgacaacgt ggeteteaga
                                                                     5700
acctaggaaa actcccctgg gccaggcgcc tgggagtggg gctgcagcct tcgggggaag
                                                                     5760
ggcaggtact gatggatggg ctagttcacc agcatctcct cattcctgtc cttgggctga
                                                                     5820
gggtttggct gggtgggcgc tgtcagatat tcccttcctt gggcctgcgc tggtcctgtc
                                                                     5880
cttgaccctg ctttcattgg cccact
                                                                     5906
```

```
<210> 3560
<211> 967
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (585)...(889)
<223> similar to gi4226107 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3560
eccagagegg atgtgagggg egecgatgge ggagggaaeg geggaggete etetagagaa
                                                                       60
tggtggtggt ggcgactcgg gagccggagc tttggaacga ggagtggcgc ccattaagcg
                                                                      120
tcaatacctc accaccaagg agcagtttca ccaattcctg gaagccaaag ggcaggagaa
                                                                      180
gacttgccgg gaaaccgagg taggagaccc tgctggcaat gagctggctg agcctgaggc
                                                                      240
taagcggatc cgactggagg atggacagac ggcggacggg cagacggagg aggcagcaga
                                                                      300
gcccggggag cagctacaga ctcagaagag ggcccgggga caaaacaagg gccggccca
                                                                      360
tgtgaagece acgaactacg acaagaacag getgtgteec teectaatec aggagtegge
                                                                      420
tgctaagtgt ttcttcggtg atcgctgccg ctttctgcac gacgtggggc gctacctgga
                                                                      480
gaccaageeg geegaeetgg geeceegetg egtgetette gagacetteg geeggtgeee
                                                                      540
ctacggcgtg acctgccgct tcgctggggc ccacctgagg cccgagggac ttcaccaact
                                                                      600
acggcctgga gcactggggc tcggacacgc aggggcgtgg agaagacccg gccgctttct
                                                                      660
gctcgagtgg ctgtccttcc tgtgccggta cgtgcccgtg gggctgctgg agcggctccc
                                                                      720
acaagaggat caacgagcgg ccgccctact acctgggccg cgactacctg gagacgctga
                                                                      780
tggccagcca gaaggcagcc gactggatcc gcatcagcga gatgctcctt gggccagtgc
                                                                      840
eccecagett egeettettg eegaageaca aggeeaacge gtacaagtag ecteaggett
                                                                      900
tcccaggggc accctggggc gaggagagta caataaattt tattctttta aaaaaaacct
                                                                      960
cgtgccg.
                                                                      967
```

```
<210> 3561
<211> 1211
<212> DNA
<213> Homo sapiens
```

<220>

```
<221> misc_feature
<222> (24)...(569)
<223> similar to gil658503 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3561
ccatcgattc gaattcggca cgaggaagca tgtccctgca tttaggcaat gaagtgtttg
                                                                       60
atgtgtacaa agccccactg cagggcgacc acaatcatct ttttataaga caaggtactg
                                                                      120
gtctacaggg acaagcagtc tttaaaacga aactcacctt cagacctcac tctacggaca
                                                                      180
gtgccacaca tagaaagatg actctqtcac ttqcaqataq qtqttcaaaq acacaqaaqa
                                                                      240
ttagaatett geeaatgget ggtegtgate etgaatgeea aegeacagaa atgattaaga
                                                                      300
aagaagaaga acgtttgagg gcttccatac gtagggaatc tcagcagcgc cgaatgagag
                                                                      360
agaaacagca ccagcggggg ctgagcgcca gttacctgga acctgatcga tacgatgagg
                                                                      420
aggaggaagg cgaggagtcc atcagcttgg ctgccattaa aaaccgatat aaagggggca
                                                                      480
ttcgagagga acgagccaga atctattcat cagacagtga tgagggatca gaagaagata
                                                                      540
aagctcaaag attactcaaa gcaaagaaac ttaccagtga tgaggtaaga ccaaatttat
                                                                      600
tcaattctag gggtttatcc tgtactcagg agccaactgc tttgaatgaa gagctcacag
                                                                      660
atcaggcagg cacaaattag ttgtctacac acgtcactga aatccagtga gataaatgca
                                                                      720
gtaacaagac agagtgatcc agaggaggat ctgatacctg tgcttagaga ggtcttagaa
                                                                      780
ggctgcatgg aggataagac ttettgetgg gtgttgaaga gtgateagaa gettgetggt
                                                                      840
caaactgtcc tgtctctggt aggtcactcc ggatagatgg aaaggcctat aatactttgc
                                                                      900
atatggagtc tgcaaaaatc gtgaccatct ttatgttccc catgtcacac tggtccactg
                                                                      960
cattgatgac attatgctga tggtatctga tctgatgagt aggaaataac tccttgcttt
                                                                     1020
gacttccaat tttttccaga tgaagagact cattgttagt tctctaattg tcccttctgg
                                                                     1080
catctgcatc tetetetgga aactgagatt teatatteet tetetetee tetetetgae
tgcaatcggg gatattcttt gtaaaagact gacgttgcca cctgcctctc ctcacttcca
                                                                     1200
ctgcactccc a
                                                                     1211
```

```
<210> 3562
<211> 3029
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3031)...(73)
<223> similar to gi5419885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3562

ttttttttt ttaggcgccg tagctgcgtc cccagaaccg ggagacttaa ggcatcttta 60

ttgcgggatc ctcacacggc ctcctgggcc cggcgatact catagacgct gccgtgctcg 120

ggaaaggcca gtgcttgcgg gggcgacccc ggcggtgggg cggggtcctc cgggtccca 180

tagccaccgc cgccgggcgt gtggagacag aacacatccc cggggtacac ggtcaccgac 240

gtcttgccgc ccagattcac cgtccggccg tttttgcgga tcagcaggt taggccgcgg 300

gcgccaggct cgccccgtg gagcccgtat ggccggaagg cgcggcgctc ggtcagcact 360

gacagcagcg cctcctcacg aaaaagcagc tcgcgggtga cgccgtcgcc gcctcggaag
```

```
eggeetetge eeceegagee eegeegeage tegaagegge geaggatgae egggtacegg
                                                                      480
ctctccagga tctcagggtc ggtgatgcgt gtgttggtca tgtggctgtg cacaccgctg
                                                                      540
egecegtgee agetgggace egegeeegeg cegecegeea eegtetegta gtageceatg
                                                                      600
tgggcgttgc ccagggtcac gttgttcatg cagccctggg aggcggcgca ggccccaaag
                                                                      660
gccccagga tgacatccac cacgcgctgc gacgtgagca cgttgccgcc caccaccgcc
                                                                      720
gcctcgggcg acgggtccag gatggagcct cggggaatga ccacgcgcac tggcgccagg
                                                                      780
cagccctggt tgagtgggat gtcgcggccc accagacagc gcaggcagta gatgagggcg
                                                                      840
gacagggtta eggecegegg tgegttgaga ttaccaaaca ceteeggeee agtgeegetg
                                                                      900
aagtcaaaca cagcgctgcc ctgactcagg ctgatctgca cacggaggcg gatģggggaa
                                                                      960
ccgtcgtcca tgtggtcttc cgaggacacc tccaggggca ggccccgggc ctgccgggag
                                                                     1020
gttccaaagg cacgcaacat gtctcgcacg gccagctcag cgtttgcctg aatatggccc
                                                                     1080
atgtaggeet geaceaegte caggeegtae tggeecaaga ageteeeca ecagetggat
                                                                     1140
gcccttctgg ttggctgcca cctgggcacg gaggtccgac aggttgtcgt gcaggtttct
                                                                     1200
ggttccgctg cagttgggga ccttgcctgg cgcccgcagg gcctccgtca ccgcctcctc
                                                                     1260
ctggaagacg ccccctgga caagtttgaa ggacagaaag acggcaccct cctgttgcag
                                                                     1320
catggtggag tggggggca tggagccctg tgtgatgccc ccgatgtctg cgtggtgccc
                                                                     1380
teggetggee acatagaaca caggeegegt etgaceegge caaaacaceg gtgtgataac
                                                                     1440
agtcaggtct ggcaggtggc tgcccccggc actgggatgg ttgctcagta gcacgtcgcc
                                                                     1500
agggtggaga teggeeeca ggtgetgaat etggaaetge acegteteet geatggeace
                                                                     1560
caggtgcaca gggatgtggg gggcattgga caccagcccc ccatcgggcc caaagagggc
                                                                     1620
acaggagaag tccagacgct ccttgatgtt ggtggagatg gctgtgcgct gcaggatgcg
                                                                     1680
geceatetge teageaatge teatgaageg gtgtgagaag atggacaget ggatagggte
                                                                     1740
cagetggggg cccactgtgc cggggacttc ggcccccacg gagatgcaga tgtccctgt
                                                                     1800
ettggteace tetgeetgge aacetggete caccaggatg gtgetgttae tgtegatgat
                                                                     1860.
gaggcagggc ccatggagct tgtgcccata gcccagctct gccagcaggt acacaggggt
                                                                     1920
etectggtag ecceetcaa agtageactg ggteatettg tecaeceggg gaggeeeggt
                                                                     1980
ctgggctttg ggggcatcct cgaggcgaag accactgcgg ccggtgcccc gcactcgcac
                                                                     2040
ategtecaeg accaeeggee geteaggtat gacaaageea aactecetea tgtaeegete
                                                                     2100
cacaaagget gggggcagga caggegggag agcagaggtg gaegtacetg egtgagtgca
                                                                     2160
cggatgggcc ggcacatggc ctcgttggcc acgcgcacga accccatggc cacctcctcc
                                                                     2220
aggeteageg gggaggeegg geagggeeeg ttggteagga agetgttgae eteagtggee
                                                                     2280
acageeteca gggetttgeg ggaggeetea ggggaaagtg gttggttete teeeggeeea
                                                                     2340
aaaatgcagg ggaaggaggc aggcagcagg cgacccagga ccagattagc atccgtcact
                                                                     2400
gtcacagggc cccctgggag gtggacaggg tgtggggctt gggggctgga ggcaggggag
                                                                     2460
caggagtagg cagcagggat agggctgaca ggaggggctg ggcctgcggc ggcaagcgga
                                                                     2520
gggcaaggcc aggccggcca gatcctgact cttacctttg cggtagcagg cgggtcctgg
                                                                     2580
gtgggeteet getgaetegg geeeaaceae aaagaggeea gaeetgaaga agaggeggga
                                                                     2640
accccctccc gctgccacgg tgttgatgtc cagctgcggg gcctggaggg tgacgccagc
                                                                     2700
tgtgctggcc tcgaagacgt gctcgaattc cccagcatag cgggctcaca tccgtggacg
                                                                     2760
tgcctcccat gtcaaagccg atgacaggct ggccaccctc ctgctggtag gtggtggctg
                                                                     2820
agtageceae caegeegeeg geegggeeeg agageaeage aetggageeg etgaaggtgt
                                                                     2880
ccatgggcgc caggccgcca tcggagcgca tgaacaacac ctgcacatcc ttgagttggc
                                                                     2940
cctggaagcc acggcagaag ccctgcacgt agcgctggat ggcgggcgtg aggtaggcgt
                                                                     3000
cggcacaggc cgtgtgcccc cgagggacc
                                                                     3029
```

```
<210> 3563
<211> 2007
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (2)...(543)

<223> similar to gi5457357 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3563
agggggcctc ttcggtgttg gtgagacagc agccaagatc ttaaaaagca acatcgatgt
                                                                       60
gttatttgca gacgtagctg ggtgcgaaga atcaaattgg aaattatgga atttgtgaat
                                                                      120
ttcctgaaga atcccaagca gtatcaggac ttaggagcaa aaattccaaa gggagccatg
                                                                      180
ctcactggtc ctcctggtac cggcaagacc cttcttgcca aagcaactgc aggggaggcc
                                                                      240
actgtgccct tcatcactgt gaacgggtct gagttcctgg aaatgtttat tggcgttggg
                                                                      300
ccagcaaggg gttcaactct gccaccaacg tcgtggtgtt ggctggcacc aaccgccctg
                                                                      360
acgtcctgga cccggccctc atgcggcctg gccggtttca tcgccagatt tacactggtc
                                                                      420
ccccttacat taaaggcagg tcctccatct ttaaggtcca cctgcgccca ctgaagctgg
                                                                      480
acaagageet caataaggae accetggega ggaagetgge agtgeteace ceaggettee
                                                                      540
ctgatgtctg tttacatacc aaagttaaaa agctggaatg ttaccaagac tgctttcttc
                                                                      600
tgcccataga cggggatgac tcagcactac ccctcaacag agatgacttt gatgactctg
                                                                      660
cccctcagca gggcttacta agcactaccc cttaacaggg atgactccgc actgcccctc
                                                                      720
aacagggatg actcagcagg gatgactcag cactgcccct caacagggat gactcagcag
                                                                      780
ggatgactca gcactgtecc ttagcagtga tgacacagca aggatgactc agcactgccc
                                                                      840
ctcagcaagg atgactcagc actgccgctc aacagacatg actcagggat ggcttagtac
                                                                      900
tgcccctcag cagggatgac tcagcaccgc ccctcaacag ggatgactca gcactgcccc
                                                                      960
teaacaggga tgactcagca gggatgactc agcactgtcc cttaqcaqcq atqacacaqc
                                                                     1020
aaggatgact cagcactgcc cctcaccaag gatgactcag cactgccgct caacagacat
                                                                     1080 -
gactcaggga tggcttagta ctgcccctca gcagggatga ctcagcaggg atgactcagc
                                                                     1140
accaccecte aacagggatg acteageagg gatgacteag cactgeeect caacagggat
                                                                     1200
gactgcaggg atgactcagc actgcccctc agcagggatg actcagcact gcccctcagc
agggatgact cagcagggat gactcagcac cgccctcaa caggcatgac tctqcaqaqa
                                                                     1320
tgactcagca ctgcccctca gcagggatgg ctcagcaggg atgactcagc attgcccctc
                                                                     1380
aacagggatg actcagcaga ctcagcaggg atgactcagc actgcccctc aacagacatg
                                                                     1440
actcagcagg gatgactcag caccaccct cagcaaggat gactcagcag ggatgattca
                                                                     1500
gcagagataa ctcggggatg actctgattg tccttcagca gggatgagtc tgttttgctc
                                                                     1560
cgatggaagc atctgtagtg tccatcagca ggtgaatggc caaagtggta tatactgtag
                                                                     1620
tcacattcag ctataaaaag gaataaagta tcgatgcatg ccacaacatg ggtgaaccta
                                                                     1680
gaaaatactg atctaaatgc aagaagccag gcacaaaagg ccacatagta tatgttccca
                                                                     1740
tttatgtgaa atgtgcagaa taataataaa aatgtataga atagcaaatc tgtagggaca
                                                                     1800
gacatgaggt gagtggttgc cagaagtgga aatgggagtt aactataaat tgcacagggt
                                                                     1860
accttacaga gatgatggaa atgtcctaaa actagattat ggcaatagtt gcactacgtg
                                                                     1920
atcagtttat taaaaatcgt tgatgtgtgt gtgtaaaatg ggtggatttt atggtttata
                                                                     1980
aattatacct taataaaggt taacaaa
                                                                     2007
```

```
<210> 3564
<211> 1085
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (3)...(1088) <223> similar to gi5882259 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3564
ccagcttgtt ttttggatcg agcactccag ataacaaagt tgctgaacaa gaagacttag
                                                                       60
aaacacagcc aagtccatcc gtagaaaaag cagtgactgt gatagatcct gaaggtacaa
                                                                      120
ttcccaccaa ttttaatgta gctgagaaac cagctgatca ttcattatca gaggtaaaac
                                                                      180
ttaaaactgc tgatgaaccc agaggtactt tagtaaaatc tggtgacggt caaaacgtta
                                                                      240
aagaaaaatc catgatttta tcaaatgtag aagatttaca acagccaaaa ttcatttctg
                                                                      300
aggtgtctag ggaagattat ggaaaaaaag aaatctcagg cgattcagag gaaatgaaca
                                                                      360
taaactcagt agttacttct gctgatggtg agaaccttga aattcaatct tattcactaa
                                                                      420
teggtgagaa attggttatg gaagaageea aaactattgt teeteeteat gttaetgata
                                                                      480
gtaaaagagt ccagaagcca gcaatcgctc ctccatctaa atggaatatt tctattttta
                                                                      540
aggaagagcc aagaagtgat caaaaacaaa aatcactcct ttcatttgat gtagtagata
                                                                      600
aggtgccaca acagccaaaa tcagcttcct ccaactttgc aagtaaaaat atcacaaagg
                                                                      660
aatcagagaa accagagtca attattttgc cagtagaaga atcaaaaggc agtttaattg
                                                                      720
atttcagtga agacagactc aagaaagaaa tgcaaaatcc tacttccttg aaaatttctg
                                                                      780
aagaggaaac aaaactcagg tctgttagtc caactgagaa gaaagataat ttggaaaaca
                                                                      840
gattcatata ccttgggcag aaaagaaggt gctggcagaa aaacaaaact ctgtgggccc
                                                                      900
cattagaget tagagatagt aatgaaatag ggaagacaca aattacaett ggatetagat
                                                                      960
ctactgaact gaaagaatca aaagccgatg ctatgccaca acacttctat caaaatgaag
                                                                     1020
actacaatga aagacccaaa atcattgttg gttctgaaaa ggagaaagat gaaaaaaaaa
                                                                     1080
                                                                     1085
```

```
<210> 3565
<211> 2611
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2612)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (239)...(919)
<223> similar to gi1871540 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3565
tctcactggg agaaatatca agttaggggt gtggagtgtt attaggaaga aataatcatt
                                                                       60
atgggctaaa agttaagtga ttagaaatta tatatatttg cttttaaaat ttctatttca
                                                                      120
agggettett atgeaaatta tgageettte tagacagtat ttetggtete etggtttgag
                                                                      180
tgtgaaatta tagccatcac ctgacatgca ttaattctgg attccttttg tgtgtggtca
                                                                      240
gcaataccag gacgtgcccg atgccggagg aaaagagcaa ccccaagggc gtggagtggc
                                                                      300
tgtggcattc cattgttata aggatgtatc tgtccttgat cgccaaaagt gtccgcaact
                                                                      360
acacacaaga agcatcctta ggagctctgc agaacctcac ggccggaagt ggaccaatgc
                                                                      420
cgacatcagt ggctcagaca gttgtccaga aggaaagtgg cctgcagcac acccgaaaga
                                                                      480
tgctgcatgt tggtgaccca agtgtgaaaa agacagccat ctcgctgctg aggaatctgt
                                                                      540
```

```
ccoggaatct ttctctgcaq aatqaaattg ccaaaqaaac tctccctgat ttqqtttcca
                                                                    600
teatteetga cacagteeeg agtactgaee tteteattga aactacagee tetgeetgtt
                                                                    660
acacattgaa caacataatc caaaacagtt accagaatgc acgcgacctt ctaaacaccg
                                                                    720
ggggcatcca gaaaattatg gccattaqtg caggcgatgc ctatgcctcc aacaaagcaa
                                                                    780
gtaaagctgc ttccgtcctt ctgtattctc tgtgggcaca cacqgaactg catcatqcct
                                                                    840
acaagaaggc tcagtttaag aagacagatt ttgtcaacag ccggactgcc aaagcctacc
                                                                    900
actocottaa agactgagga aaatgacaaa gtattotogg otgcaaaaat coccaaagga
                                                                    960
aaacacctat ttttctacta cccagcccaa gaaacctcaa aagcatgcct tgtttctatc
                                                                   1020
cttctctatt tccgtggtcc cctgaatcca gaaaacaaat agaacataat tttatgagtc
                                                                   1080
ttccagaaga cetttgcaag tttgccacca gtagataccg gccacagget cgacaaatag
                                                                   1140
tggtctttgt tattagggct tatggtacat ggcttcctgg aatcaaaatg tgaattcatg
                                                                   1200
tggaagggac attaatccaa taaataagga aagaagctgt tgcattactg ggattttaaa
                                                                   1260
agtttgattt acatttatat tccttttctg gttcccatgt tttgtcactc atgtgcacat
                                                                   1320
tgcttcgcca ttgggcctcc agtgtattgt tctgcagtgt tgaaacagaa tqqaaatqac
                                                                   1380
aagaaatatc tgcagttatc cagggagaaa gtataatggg caaaattatt ggtttctttc
                                                                   1440
tttactttgt gcttgttttt atccccttgg ggntgttttt ctctggattt ttaaataaac
                                                                   1500
ttacacttaa gaaatttaga ttaccagagt atgcctgact gtaagaaaaa gaaattgaga
                                                                   1560
1620
aataaataaa taaataaaat cttttccaca gagaaaggca actgtgatga taaaatttaa
                                                                   1680
cgttccccca aacactgagt caatgagatt tttctcagga gatactttac ctataacaac
                                                                   1740
gccgttaaat ccaaatctct tctaaacgat ggcattctat gtaatgcctt tcctggactt
                                                                   1800
ttttggccac tgccctggac tagtgaaaga atggactcta tctttatctg caagaggaac
                                                                   1860
taaggcette tateagactg cetggeeage etggggeact gaaaataegg etcatqttaa
                                                                   1920
tgagttacat tatcagccag cccagccttg cccaccattt aagaaatatc acagagccac
                                                                   1980
tagateteat atgatettet teaageeatt attttaaete aagaaaaete tagagaagaa
                                                                   2040
aagtgaagaa gtcatgttga agaagatgta agaatgtgtc aaqaccatcc agaaatgata
                                                                   2100
tgagaaatac tgatatttta aatggttgac atcatccagc gaaatgaatc tacattaaat
                                                                   2160
gttgttttaa ctgcgctatg gattaaaacc attcatatag gagttaggtc tttaccaact
                                                                   2220
actattctgt tattttttt tttaatctgg acaacatttg tccctaggta ggttagggca
aaaaaattot ttoaactoot tttggogaag aaaactgtaa cagaaaataa attttgaatg
                                                                   2340
tgtacttaag tctttattat atttgaaaca atttttttt caattttaaa agctgaatga
                                                                  . 2400
agacaactta ggttgcctaa cctagttcaa aatgaaatta tttaqatacc aatttttaaa
                                                                   2460
atactggaga gaatttatat gtötttttcc agagttctga tgataagcat ttggagtgca
                                                                   2520
tttattcctc cagataataa atgtgtgttc agaacttttt gtgtttttta aggcattaat
                                                                   2580
aaagccttcg ataatattaa atacaaaaaa a
                                                                   2611
```

```
<210> 3566
<211> 5891
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5892)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(1306)
<223> similar to gi4678438 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cgttgtgacc taggacaaqt acctcacttc tctqaqcctq tttcctcctc tqtaaaataa
                                                                     3300
tgtctacttc acaaggctgt ttcaaaggtt aaaaaagata gcatatgtaa actgtcttag
                                                                     3360
ctcagcgctt gacatttcct aagtgtgcca taaatattaa tctctttcct tactcccagc
                                                                     3420
tccaatacag cgtaacagtg ctttaaaatg tatgtccttc atttctcctt catttctcag
                                                                     3480
tcacctttgt ctcttcccta gggcatatcc ccaaattctt aaacaaaaa aaatgatttt
                                                                     3540
tttccccttc atcaaacttt tcactggctc ccttagcacc cagtagaagg tcccaactcc
                                                                     3600
ttacagagtc tgggttttca tgtccctgtt tgcttacaca gcttaatctt ttgccacttt
                                                                     3660
ccccctcaca ttgattaagg tagccaagtt taactattta cacaactatt cacacaagtt
                                                                     3720
attetetggg cetgeageag aaacatgatt aacaatttta atgeeeagag taaacaacag
                                                                     3780
aaatttttct taaattaaag gaatagtgtg aaaatgctgt aagtacagaa aatgcaacct
                                                                     3840
ccattccagt agaacaattt cctttgcctt gtccttggct ctccaaaact gttcatttat
                                                                     3900
tgtggtgtct tttagatttt agtgccctgg gacaaagatc taatttcccc accctacttt
                                                                     3960
tgactctatc ctggactacc tttcctcacc tctatctctc tcaaccagac taactcttta
                                                                     4020
ttccttagac ttgatgatgc atccctcttt agagatccaa agacacccca agcatccccc
                                                                     4080
tototoagoa ataatoacat tgtatagoag tgtttttoaa agtgtggtoo toacacogoo
                                                                     4140
tgtgttagaa tcacctttag tgtttgttaa aagaattgat tttgggttcc cactcctgac
ctaaccagaa tatctgagaa cataggcagg aatttacatt tttgacaagc tcctcatgat
                                                                     4260
tctgatgcac caaaaatttt aatgaataat catcttcccc tactagactg aacaccttga
                                                                     4320
gaggaaggac tgtgtctttt attgttgtta tattgttaat acctggcaca gtgcttggaa
                                                                     4380
cattagcttg gctaatgttt attgaatgaa tgtatgaatg aaaaaatgca ttatgaaaqt
                                                                     4440
tteetettgt acteteatgt tegtagtgat gtttgttaet teetgggeag aaaagettgg
                                                                     4500
ttactactcc atttgagctg tattaattct attttgcaga gatatcaagg ctcctacata
                                                                     4560
ataaatgatc attgtcctcc tcaaaaactc tttggcagtt atcttgggga aatgtctttg
                                                                     4620
ggagcatatg ggcaccattg ttttcagtaa catttcagtc ttgtcaaact ttgttgtttg
                                                                     4680
aaggtgggat tacatttcgg ttataggcca aaaatcactc aaaggctaag gcctacttaa
                                                                     4740
aaaagtgggg aattaaactg ggtttggatt aagcaatgaa gtttgactct gaagtcccaa
                                                                     4800
attetgagte aaacagtgaa aaatgaette taagatacaa catggtgaca aagtaettag
                                                                     4860
tgggggtgcg atgggcccca gatatttact tcagttaact tggcttttat aqaatcctqq
                                                                     4920
caatgccatg gaccttaaga gaagtaattg gctacctcta gctaaaccca qctqqacaaa
                                                                     4980
gagaatagga cttgtattta acattttcaa agaaggtgac tgcataagct tttqttqttq
                                                                     5040
ttgctctact caacctgttc tccacaactg tttctaccag aagattattt tatgtctgca
                                                                     5100
atttatgett gtttecaett tttatattgt ettattgaag aaageacaaa aataateaaa
                                                                     5160
aataaagtaa aacctgtttt gagagtatga aagaaatttt aatgccacat tgaggttctg
                                                                     5220
gctacttgta agtaagagta actgcatctg gatgtgtttt tattatacaa ttctatgtgt
                                                                     5280
atctttagat gcagtgaaat tcagattgca gcaaaatcac ttatctgttc ttttcqqcta
                                                                     5340
aaacactcta ggtgaatttt ctaaacttcc atggtttaca tatttatata tqactaccaa
                                                                     5400
gatggagcaa tccacggatg gacttttgaa taaactcaaa tatttgatac tgctttcctc
                                                                     5460
caaggaatgg gagagtgtca ggccaggtag gtaaagaaac cactccctaa acttaattcc
                                                                     5520
tageteeetg aagecaactg ceageettgg agecaaatgg tegtatttgg etgtgtta
                                                                     5580
caggttggcc aaacgtgatt gcccatcagg tcagacaaaa gctgcctttt atgggtgtag
                                                                     5640
tetgecaget teagacatat getgtattgt tgttattgge tagactattt attagactat
                                                                     5700
tgttggacta ttttttatca aatgctttac cccacgcctg tttgtattgg gagctctgga
                                                                     5760
cccaatagtg tetetectag tgacagaaat atgagcatet gtggattaca cagceteate
                                                                     5820 -
cetetetaca atattecage ceatecaaaa tgetatatta tgaattaaat aaatatatat
                                                                     5880
gtattcatga a
                                                                     5891
```

```
<210> 3567
<211> 2174
<212> DNA
<213> Homo sapiens
<220>
```

<220>
<221> misc_feature

<222> (1705)...(418) <223> similar to gi257387 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3567
ttttttttt ttaagatttt cetetttaet etegteetta catgtecaca gaetteatgt
                                                                       60
agagaggetg ageetttega eeacaaagtg tgttetgtgt tgaagatgtt ataatgatgg .
                                                                      120
gagagggcag ttgcagcagc ttctaaccaa gtgtctacaa cacatgtact actgtttcct
                                                                      180
acctgtgtca cctctgcaaa aaatggagct ctgagcccaq ttctgtqaqc atqqtqtcaq
                                                                      240
agecetecaa agteetgaga aateaatace agggatecaa ateteagaea ecagtttgaa
                                                                      300
gcaatacctg gataccaaga ctcagagtga ggatatggat tttgggagct gacagttttg
                                                                      360
ctgatcctgc cacactggca ggggctgaag tccagaaatg gtgtgtagct ctagtcattc
                                                                      420
ttattcacca cagcicttat ticacagitt titcccitigg titctictgt tictictgti
                                                                      480
ceteatatte aagtatttte tgttggaaat ageetgeagg aggattettg etettetegg
                                                                      540
cttcctggat gaaaagtgag aagagctgtg tcttcacaaa cttcttcaca aatcggcggt
                                                                      600
tggtcttgga ggtcagagcc ttacagaagg atctttcttg gaagtggcct tgcccatttg
                                                                      660
cctcccgctt gatataggaa gcataatggc ccacaatctt gacaaagaac tgcacaaagg
                                                                      720
ggcctgaaac atgctcgttg atttgttctg cagtctttaa ctcattgatc ccctgaccaa
                                                                      780
gagagtetaa gatgteatee tgaagetteg gtggeaggat gtetttttea teaccaaceg
                                                                      840
acattaagaa ggttccttca caaagattga ccagcaggac ctcttccata gggctgtcca
                                                                      900
tgacctcctg ctggaagcgc atttgtactc caaccatgaa gggggtgggg cagcagacgg
                                                                      960
tggccagaag gctctcaggg acaacaggga tgtaggtgtg cgcccagctg aaggggtaga
                                                                     1020
gcagtgcggc agcagcatgg atgcactgag acaaggtgct gagaccttcc gccaggaaga
                                                                     1080
tgatttttct ctccagcacg gcagaggcaa agatctgaag tatctgttca aaactgagac
                                                                     1140
agtgcaatag agaactaaaa tccacatgtt ctaggtggga gtccaggggc cgtgtcagtg
                                                                     1200
aaatgaactc agtgcctgag tcggggatga agctcttgag agtgacagtc ttcccaggag
                                                                     1260
cagggaaggc tgcctctcgg aggccctgca tgaacgggta gatgacagcc atggagatct
                                                                     1320
gatgtetett etecaettea teeaggatet tggagaacaa geegaageag eegatgeage
                                                                     1380
tgatgatgca gtacactttg ggaaggcgag ggccagggcc ggcaggcaag aggcgcctgc
                                                                     1440
agtatccaat ctttctgctc ccatccacat tggtcagaac gaaggagaag gtctccctgg
                                                                     1500
gatactcggt gagtgatgcc cactcattcc catctgggaa gcagaacaag gggatagctt
                                                                     1560
tgagcagccg ctcctcctcc tcctgctgac cccgaagcag gttctcccgc ttgggaaatt
                                                                     1620
ggtaggtgat tataggctcg taatcatcct ctgaacgctt ctttttgaga gaaaccacaa
                                                                     1680
gaaggtattc aaagaagtgc tgcccccag caaagttggg caaagagtgc tcctgggccc
                                                                     1740
tttctggttc ctttaaagct tcccctgaat tgtcctgggg tggtcctgaa atcaagccag
                                                                     1800
agcccattta gtataatctc attgatccat tcctggagtg gagtctgtga gaatccgggt
                                                                     1860
gacctecaca ceteaaggee geettgeeaa tgetgagata cetggataet ggeeagaace
                                                                     1920
accagtcact caggatcagg gccaaatggg cagtttccac acctgccctg gtagacttga
                                                                     1980
aaccatgggg agccaagcag aggaaagaaa ccactgacac agaagccacg gaaatgtgct
                                                                     2040
ggagaggcca catggaggcc aaggccccag ggtaccaccg agactgccta acctgtcggg
                                                                     2100
tgcttctggc agtcctggaa caatacggcc tgagagttta gttcatacta agtgaataag
                                                                     2160
aacaggctca aagg
                                                                     2174
```

```
<210> 3568
<211> 1435
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc feature

<222> (1272)...(274) <223> similar to gi2905643 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
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                                                                       60
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                                                                      120
acagaagett etggeateag cacetgeaag ceetgtteag teateattea tgategeeaa
                                                                      180
atactccttc tggtgttcaa ccagcttcag gaatacttgg tatttcttat catagtattt
                                                                      240
tttattctgg tagtctcggg aacacaactt tcccaacttt gctcattttt gccattgctt
                                                                      300
cctgttacag aagcgaaatc ccctgaggca caggcaccca gaacagcagc accacacaaq
                                                                      360
aacggactcc cacctettgc gacagggacc acaggcatgc cagtaatgtc cgcatgcatt
                                                                      420
tgcacaaaaa gggggattct tggctgaggc ctccacatag gaaaagagta cttgattgag
                                                                      480
tggccctgct gcctccatgg cttctataat gaagcgagtc cccaaagcaa tggcttgaac
                                                                      540
tgttgccagg tagagaatgg caagatcatc aaggtcctga gacagtttca atccqqtqac
                                                                      600
catgcccttt agtgtcagat ctgctaaggg agaccggttg ccatggaaat ctgqccaaac
                                                                      660
atgtaaatca acagtaagga aacccacagg ctgagccttc ttaatcagat ccaggtgact
                                                                      720
gttcaaatat gcatatatac tctggcatct ggctgtggcc tttacttgta gttctggaaa
                                                                      780
agcagcatgg cettgtacca tgtggtetat caatttteca gtaacgetet gaccacette
                                                                      840
attcagccag aacccaggta ccatggctga gaaataaggc ccccagacgc ctggtacaaa
                                                                      900
aatcgggtct ttgctgatcc ccatgtgaca agaagacgtt ccacagatga cagccagccg
                                                                      960
tgacgtcact ggctgcccct cacagatgag gccgtgccct ctcacatctg ccccaatcac
                                                                     1020
tectagteet cetgeatggg cateaatgag tgaagetgeg accgeaatee cagggagaag
                                                                     1080
gecaaggtet ettgetgeet etggtgtgag eccattteea agagaagete eaggaggtag
                                                                     1140
cacttggttt cctattttgc tgtaattatc tgcaacaaag tcttccaaac caatcatttt
                                                                    1200
ccagaaactg tcgtcccagc ctttctctgc tgaatatgtc cacttacaca ccagggagca
gagagacett gittataatt cagatititt aaaatgigat teagititet ticaaaaatg
                                                                    1320
tttatgttgc tgaggctggt ctccatctgc tggcctcaag caatcatcct gccttagttt 1380
tgtgagtagc tgggattaca ggtgtgaggt gagtcgcagt gcctccqcca tctcq
                                                                    1435
```

```
<210> 3569
<211> 1581
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1582)...(860)
<223> similar to gi5360111 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3569
tttttttta caagaaaaat tgttagttt attggtatta cagtgtactt ttaatacaag 60
ctaaatacaa acacaattct tacatattca gccacttatt ctgcaaaaca acatgccaag 120
atcaaccctt gaaaagttta taaaaaaccc aaaaccccag aaaatatcct tccctcaact 180
ctaaggactc ccatatacaa atgcaaaaat tgcctatttg tcaataatca cattaaggtg 240
ttgaggttat tgactgaggc aggtaaaaaa ccaatttctg atttttaaat taaattagct 300
```

```
CCagataaaa gcatgttatt ttccacatac gctatctttg tattctgcac aqaqttccaa
                                                                      360
ggcaaagatt gctcctggct ttatggaatt acccagagat ggatgacttg tggtgggctg
                                                                      420
acttateaca gggteetttt acteetteet teeeggatag ateetttage ttetttqqqa
                                                                      480
ggtggcatat ggaattgggt ttcccacgga attggattat aaaaggctgg ttctqqataq
                                                                      540
gaatttecae tgtaaaaace tgtaagtttt ceattggeat aaccataget etttgeaget
                                                                      600
ggacgaggtt tatgtttcgc attttccaac cattcttgaa actttttttc tgctatttcc
                                                                      660
tttttctcct gtatttcagc ttgctgttgt ttttcttttt cctttcttt cttcttcctc
                                                                      720
tcacattctt cagcattttt tttctttaac cattcttgat atttttcttt tgcttttct
                                                                      780
tgcaagtatt ctttctccag ttcctttgct gctttttcct ccatttctt attaatttt
                                                                      840
tgttctcttt cttttctttt ttgctcattc tttttctgaa cccattcctt gtgcttttct
                                                                      900
tcagcaatta tctttcttt ttcacgttct tccatttctt ttctttttc tagttgttga
                                                                      960
tttaatteet etagagettt eagttgeage eggteaegtt ettettttte tttgeeaata
                                                                     1020
aaccacacct cccatggtgt caggcggctt tctggtaagc gcacctgttt ctgttcttct
                                                                     1080
tggttatttt ctgattcaac ctgagtgctg gcgcacccct gtaactccat tcctctcagg
                                                                     1140
ctcgccactt tggcctctga atcatgggca tcttcatcca cgtcttcctc atcatccacg
                                                                     1200
tetteeteat ceteccegte accetegtee tegteaaact ggaagetetg gtggecaagg
ggagacaaca gcgacctggt ggaattgctg cagctcagcg gcagcggcgg cgacggcgag
                                                                     1320
egeaceacet ceageceetg eccaegtgeg eccgteatag ggaetgagea ggagteegag
                                                                     1380
gagggccgag acctgggtct gcagtcagca gagaaaccgg cgtaggaaga gggaaaagta
                                                                     1440
ggcccccagc gcccgccgg ccacatctgg ccccgccaag ttcaaactgg cggaacccgc
                                                                     1500
ggcggggacg cgcttttcca agcgggccct gggcgccgcc aggccggcca atcccgggca
                                                                     1560
gcacagaccc cgcgttgcca t
                                                                     1581
```

```
<210> 3570
<211> 6646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1761)
<223> similar to gi3336980 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3570
gcccggaaaa agatgttcaa tacagtcatc cagtctgtgc ctcagcccac aattacggtt
                                                                       60
ctaaataccc cactcgtcgc cagtgctggc aatgtccagc atctcatcca ggccgctctt
                                                                      120
ccaggtcacg ttgtggggca gccagagggt acaggagggg gacttctggt cactcagcca
                                                                      180
ttgatggcca atgggttgca agcaacaagt teceetetee eeeteacggt gacateegte
                                                                      240
eccaageage caggigige acceattaac actgigigti caaatacaac gicagetgig
                                                                      300
aaggtggtca atgcggccca gtcgctcctc acggcctgcc ccagcataac ctcccaagcc
                                                                      360
ttccttgatg ctagcatcta caaaaataag aaatctcatg aacagctgtc agctctgaaa
                                                                      420
gggagettet gteggaacca gtteccaggg cagagegaag ttgaacatet cacaaaagtg
                                                                      480
acgggcctca gtaccagaga ggtgcggaaa tggttcagtg atcgtagata ccactgccgg
                                                                      540
aacttgaagg getecagage gatgataeet ggagateaea ggtecateat cattgaetet
                                                                      600
gtgccagagg tgtccttctc cccatcgtcc aaggtccctg aggtaacctg cattccqaca
                                                                      660
acagecacae tageaaceca ecettetgee aaaegacaat ettggeacea gaeteetgae
                                                                      720
ttcacaccaa ccaaatacaa ggagagagcc cctgagcagc tcagagccct ggagagcagt
                                                                      780
tttgcacaaa accetettee tettgatgag gaactggace geetgagaag tgaaaccaaa
                                                                      840
atgacccgac gagaaattga tagctggttt tcagagagac ggaaaaaagt gaatgctgag
                                                                      900
```

```
gagaccaaga aggctgagga gaatgcctct caggaggaag aggaggctgc tgaggatgag
                                                                      960
ggtggagaag aggatttggc cagtgagcta agggtctctg gtgaaaatgg ctctctggaa
                                                                     1020
atgcccagca gccatatett ggcagagege aaagteagee ceattaaaat caacetgaag
                                                                     1080
aacctgaggg tcactgaagc caatggcagg aacgagattc cagggctggg tgcctgtgac
                                                                     1140
cctgaggatg atgagtcaaa caaactggca gagcagctcc caggcaaagt gagctgcaaa
                                                                     1200
aagactgccc agcageggca cttgctgegg cagetetttg tecagacaca gtggecaage
                                                                     1260
aaccaggact atgactccat catggcccag acgggtctgc cacggccaga ggtggtgcgc
                                                                     1320
tggtttggag atagcaggta cgcactgaag aacggccaac tcaaatggta cgaagactat
                                                                     1380
aagcgaggca acttcccacc agggctactg gtcattgccc ctggcaaccg ggagctcctg
                                                                     1440
caggactatt acatgacaca caagatgctg tatgaagagg acctgcagaa cctctgtgac
                                                                     1500
aagacccaga tgagctccca gcaggtcaag cagtggtttg ctgagaaaat gggggaggag
                                                                     1560
accagageeg tggeagaeae aggeagtgag gaccagggee etggtaetgg tgageteaea
                                                                     1620
gcagttcaca aagggatggg tgacacctat tcagaggtgt ctgagaacag tgaqtcqtqq
                                                                     1680
gageceegtg teectgagge cageteagag ceetttgace acategagte eecaggetgg
                                                                     1740
acgtcagete gaaacagaet gaatttgate tgattaatgt gaaggaetgg ceagtetggg
                                                                     1800
aaaccgcctg ccacgtggaa gagccaaacc cgactctctg ctgccacatg ccgttcccat
                                                                     1860
geceggetge tgggeacetg ggagagette cagaateete geagacagee cagageetge
                                                                     1920
egetaceete ggeetgeeca eeaccaagea ageageaage aagatggggt teteateagt
                                                                     1980
tettectece acaatgtagg acettteett tacetteeaa tggataaaat agtteagagt
                                                                     2040
tcatagtcat attcatagac acagaatcaa gcttttaaca tatacatcca cctctatatg
                                                                     2100
ttaaataaaa catcagatta tcaacactgt cattacgtag aaactttggt tagccaagca
                                                                     2160
gtgcattgtc agttacgtca tctctaaaaa tgacctgtgt ctgttctctg gggattgctg
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ggtcacaggt gcccctcacc ttccacagtc aggcagggaa gttataggca caaagctacg
                                                                     2280
totggaacco otttgtgcco cotttgtgtt cotcaaggaa gcagtacctt tgaagagato
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tetgetgeat taagtgatga ceggetacgt tteatgteag gettgetttg cettgtggge
                                                                     2400
tactcagtgc agaacctgct gtaaccctca gttcaaaaaa tggactggca atgtgattag
                                                                     2460
cgttggatgc tttaccattc tctttagttg ttaccgtaat tctgcttttt catgggagtt
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tgaatcatgg accataactt ttcagttatc agatcaacta aagaaacatt tgttgttaag
                                                                     2580
cctaatgtgc tgacctatgt gcctgcattt tttttttaat ctagacatgt ttggagtgag
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aagetttgac eactgeggtt tteagageee ttteteeaca eteattteag ageeteetat
                                                                     2760
ggtttgggaa ggaataacac actggcccat tagtaagggt gaaggctgga gggatttgtt
                                                                     2820
gacttettgg aattateaga ggtagggtgg tetttageac aaagaettge atgeagagat
                                                                     2880
ccctggcaga acacccagag tgcccgtggc tcccacccca gggtctggcc ggtgtgctgg
                                                                     2940
atgcatgccc aagggtgctg ggcatcactg gtccttgtga ggatgctttt aaagttttat
                                                                     3000
atttatgtcc ccaaacttgg aaacaagaac tctactttag cctaaccetc atgtectttt
                                                                     3060
ttgaattgag aaaattacag gaaatggtgc ctttgaaaat tagaaaactt gcttacagag
                                                                     3120
ctgttctaaa tggtaaatcc tcaatttccc caagaccggt tgctctgaga gtagctggta
                                                                     3180
aagaggggcg aactaaagac ctgtccacct gtagctccgc tcatttctta gaaaccacct
                                                                     3240
gcttcccaga gtgccaagcc acaagtacca ggcttcgtgg gcacagacac ctcctgggct
                                                                     3300
gggcagagtg acagtgctag aagaccccag agagagggca agggctttgg gcaagaagca
                                                                     3360
ctggtggtgt tttagggacc gtccttctcc cctacccagg gaactggacc tggcaqqqca
                                                                     3420
ccgtgctcat gtggctccaa ggacaagcat ggcggtggcc ccttctgcct tccaggagag
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                                                                     3540
ccaataggga ccacatetta tttgteteaa acagggaett gtgagtaett ggcaagtttt
                                                                     3600
gcagcctatt tttgtattct taatttgggg agtaaagatg tttggtctca aaaacctttg
                                                                     3660
aggaattgcc aagaatggcg agtgattgct ttccttcaga gaacagacac ttggaatttc
                                                                     3720
teettttagt gtttatatae gtgeagatta atttatatat atatatae acacacacat
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atacagtata aatactcatt tgattctcgt aaaacgcgca tctggcgtgt gcagttgaga
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aacttggtgg cacatgggtg ttgggggagt agcctgtgtt ggagggacac cagtgcacta
                                                                     3900
ggcagctggg gcggcccagg ctgaagccat ctccgggtgt ctgagaaacc acccagtgcc
                                                                     3960
tracetreag attestigg cateacetre agagecetge atgeactgge tgaagagttg
                                                                     4020
gtctgtggag aggattttct tggttacttg tattcacggt taatttacaa cccaaacagc
                                                                     4080
aaaacacagt tggtggacaa gttcatgcag gacctacagt gacccagcca tgggcactag
                                                                     4140
ctcatctttc aggtggaaaa gtacagtgct gcctgccctg gtatgttttt cttatagatg
                                                                     4200
ttagccctgc ccaacagcca gggctacact acaaaaggca agaatgccca tgtaaggagc
                                                                     4260
ccagcagtet ggacagatee ttetteetet getgttggat gagagtgagt gagtatggte
                                                                     4320
```

```
tggaccttat ccttgaaaga tqatcaaaag cgatgatgag ggaggcagtc atcacgcagg
                                                                     4380
tgcttaaagg gacattgtag gaggtactca agggttttggg ggcaaaaccc tgaatccagc.
                                                                     4440
                                                                     4500
cagtcgtgca cagagacaca cccacactag cccagtggca gtgggggatg tgggatggca
gcagccaggt atgtagccct gtcacaggac agctcactgt ggttttgcac actgcctaag
                                                                     4560
ggttaaattg tgttgttgcc ttcagtagaa ggcatttgtg ggctgcagag ttgagagttg
                                                                     4620
ggtgaggtta gtctctcctg aagaaaaagc ctataaaaag tggctaatct tatccctttt
                                                                     4680
ctctgtatgc agttggactc gtcagagata gtaaaatcat cttttagtgt ttttttgttg
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ctgatgtctt gtacccattt gttttttaca tggggttgta gatcgagttc tcaaaggtga
                                                                     4800
aaccagatga tcattctgat aaaggaaatt taaatttgat acatatgctt tgtatatttt
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gattacttgt tttcgttttt gactataaag gagetttttt tettgeteag agtttacetg
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accoagetto ettetetet tttacetgag ageacagace teteteagee ageetgeeca
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gtctgagcaa atgggcagtt gtggagctca agcetttete etgtgetcaa gteeetteee
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cggcagggac atggttgggc catgccacac cagggctggt gaggcaacca gttttgattt
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tgacagagtg gctggaggaa aagtggcaat caaggtgctg cttggtttgc tctgagtgca
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aatggaacca acaggtttct gctgcaatct gtgtgttccc agtgccaggt cacaccagga
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ggggtggggc agggctaacc aagtggtctc tgaactcacc gagcgtctgc acttggttgt
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gaagttaatg ggagtacaga gagcgtctgg ccttggagag gggttgagag cctccttttt
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ggttetteat teetgagete ttgeetgeee acaaatetga eetetttgaa tggggaegea
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gtccttcaac agagaagttt ctatggcaaa gaagtttcta tttagctcta gatccagcag
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agtcatccat totaactgcc ctgaagtcta gagcagggga gggaacccag aggctgggga
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tgagactagg cagaccetgg ttaccatatg gacaaggaca ggggaaagca ecceetteet
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caatttctga aagttctatc tttgggttcg caggactttg aggatgataa agaacatata
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ggtactaget tgttgttget ggtecaaage ttecacagee etgagaattt ggetttegtg
                                                                     6060
gctgctctgg cagctgagcg aagggaggaa ggcagccgct ctggtgggga ctctaggcac
                                                                     6120
cttccctgct gtccacttgg ataggcggtg agcccaggg tactgagagg agcctgagca
                                                                     6180
tttacctgcc attagtgcct cttccttcag gagactggct tgaaacgtgt gttcatgtgc
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gcgtgcacac acacacatga gcacctgtat gtgttaatga atagtttttc ttggttaatg
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ctttttaact tctgttcctt tccgtaagtg gatgattcaa aattaacgtg acttggctgg
                                                                     6360
gcgcagtggc tcacacctgt aatcccagca ctttgggagg ccaagggagg cggatcacct
                                                                     6420
gaggtcagga gttcgagacc cacctgatcg gcatggtgaa accccgtttc tactaaaaat
                                                                     6480
acaaaaatta geegggegtg gtggtgegeg cetgtaatee cagetaetea ggaggetgag
                                                                     6540
gaaggagaat cacttgaacc cgggaggtgg aggttgcagt gagctgagat cgtgccctg
                                                                     6600
cactccagcc tgggcgacag agcgaaactc cgtctcaaaa aaaaaa
                                                                     6646
```

```
<210> 3571

<211> 2192

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2193)

<223> n = a,t,c or g

<220>

<221> misc_feature

<222> (21) ...(802)
```

```
<400> 3571
gtccgtagga gaacccccac agcggccgcg ggctagcaag ctcccggagc cgttttcgtt
                                                                       60
ttaccatgac ccagnoggtg gtcgtacagg ggggccagtg cggaaaccag atcggctgct
                                                                      120
gettetggga cetggcacta agggagcacg cegeggteaa ceagaaagga atttatgatg
                                                                      180
aggcaataag cagcttcttt agaaatgtgg acaccaggca gtcttgattg atatggaaga
                                                                      240
aggggtagtg aatgaaattc tgcagggacc actgagagat gtatttgata cgaaacagct
                                                                      300
catcactgat atttctggct caggaaataa ttgggccgtg ggtcacaaag ttttcggcag
                                                                      360
tetttaceaa gaceagattt tagagaaatt cagaaagteg geagageact gtgattgett
                                                                      420
gcagtgtttc tttataatac attccatggg aggaggaaca ggatctggac ttggcacatt
                                                                      480
tettttaaag gtgettgaag acgaatteee agaagtatae agatttqtqa etteeattta
                                                                      540
tccttctggt gaggatgatg tcataacctc accttataat agcatcttgg caatgaagga
                                                                      600
acttaatgag catgcagact gtgtattgcc cattgacaat caatctttat ttgacatcat
                                                                      660
tagcaaaatc gacctcatgg tgaattctgg aaagttgggt acaactgtga agccaaagag
                                                                      720
tetggttact teaagttetg gggetttaaa aaagcagcat aagaageeet ttgatgeaat
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gaataacatt gtggcaaatt tgctcctcaa cctaacgagc tctgcaagat ttgaagggtc
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ccttaatatg gaccttaatg aaatcagcat gaatttagtt ccttttcctc aacttcatta
                                                                      900
tetegtgtea ageetaacae etetgtatae aetgacagat gttaacatte eteetagaag
                                                                      960
attggatcag atgttttcag atgcctttag taaagatcac cagctgcttc gggcagaccc
                                                                     1020
caaacacagt ctttacctcg cctgtgcact catggttaga ggaaatgtac aaatttcaga
                                                                     1080
tcttcgtaga aatattgaaa gattaaaacc atctctacaa tttgtctcct ggaatcaaga
                                                                     1140
aggctggaag accagcctgt gttccgtacc tcctgtgggc cattctcatt cgttattagc
                                                                     1200
tttagcaaat aacacatgtg tgaagcccac cttcatggaa ctgaaagaga gattcatgag
gctctacaag aaaaaggctc accttcatca ctatctacaa gttgaaggga tggaagaaag
                                                                     1320
ctgtttcaca gaagctgtgt catctttatc agcactcata caggaatatg accaactgga
                                                                     1380
cgccacaaaa aacatgcctg tgcaggattt acccagacta agcatagcta tgtgaaaaag
                                                                     1440
aaaccctcaa aaatactttc ttaatttcac attgtttttt ctgacctttc tgtttcaaca
                                                                     1500
tttttgtaat ttggaaactc cagtttttc atattatcgg gaaatatttt tgtctaaaag
                                                                     1560
agtgatttct gtttaatcgc aatttgttgg taataccaat gtgtgaaatt agtgaaatct
                                                                     1620
tagtacetta aetteaaaca tttetettea gaaaagttee etttetaaa attgagataa
                                                                     1680
catagitett gaatatitig eigiattiat ageeteatat tiaggeatti aigeaetgat
                                                                     1740
gtgtcttcaa taaaaatctt gtacagatat atttttataa ttaatttagt aatttatatt
                                                                     1800
ttgatattct atttaagtta tcctgattct ttaaaagtag gttaattggg agtaggagga
                                                                     1860
ccaccaatat taaatatttc cgtgtaatag ccacccaact ttttcaggca taggttttat
                                                                     1920
taccaactgt taaggaggtt ttgcttcttc tttagataac aacttgtttg cccaaaagaa
                                                                    1980
tectaattig tacacttaae atgtattigt attaaaetti ttaaataatt gettiettat
                                                                     2040
caaaccaatt gattttataa taaatgtcta tatttttcaa cagtgctact tgttattgtt
                                                                    2100
ctgcatgaca tttatgcaaa tgaacagaat gttactaagc ttgatatctt ccaaactttg
                                                                    2160
caataaatgg ctataattgt tccggttact at
                                                                    2192
```

```
<210> 3572
<211> 1504
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (25)...(1130)
```

<223> similar to gi577843 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3572
ccactgatga cccttagtca gtgcggtgga attcccggcc acggccactc gcacggqqgt
                                                                       60
caeggeeacg gecaeggeet ecceaagggg cetegegtta agageaceeg eccegggage
                                                                      120
agegacatea aegtggeece gggegageag ggteecgace aggaggagae caacaceetg
                                                                      180
gtggccaata ccagcaactc caacgggctg aaattggacc ccgcagaccc agaaaacccc
                                                                      240
agaagtggtg atacagtgga agtacaagtg aatggaaatc ttgtcagaga acctgaccat
                                                                      300
atggaactgg aagaagatag ggctggacaa cttaacatgc gtggagtttt tctgcatgtc
                                                                      360
cttggagatg ccttgggttc agtgattgta gtagtaaatg ccttagtctt ttacttttct
                                                                      420
tggaaaggtt gttctgaagg ggatttttgt gtgaatccat gtttccctga cccctgcaaa
                                                                      480
gcatttgtag aaataattaa tagtactcat gcatcagttt atgaggctgg tccttgctgg
                                                                      540
gtgctatatt tagatccaac tctttgtgtt gtaatggttt gtatacttct ttacacaacc
                                                                      600
tatccattac ttaaggaatc tgctcttatt cttctacaaa ctgttcctaa acaaattgat
                                                                      660
atcagaaatt tgataaaaga acttcgaaat gttgaaggag ttgaggaagt tcatgaatta
                                                                      720
catgittigge aactigcigg aagcagaate attgccactg cicacataaa atgigaagat
                                                                      780
ccaacatcat acatggaggt ggctaaaacc attaaagacg tttttcataa tcacggaatt
                                                                      840
cacgctacta ccattcagcc tgaatttgct agtgtaggct ctaaatcaag tgtagttccg
                                                                      900
tgtgaacttg cctgcagaac ccagtgtgct ttgaagcaat gttgtgggac actaccacaa
                                                                      960
gccccttctg gaaaggatgc agaaaagacc ccagcagtta gcatttcttg tttagaactt
                                                                     1020
agtaacaatc tagagaagaa gcccaggagg actaaagctg aaaacatccc tgctggttgt
                                                                     1080
gatagagatt aaaaacatgc ccaaacaaac caacctgaat catctttgtg agtccttgaa
                                                                     1140
aaagatgtgg atatttgaac ttttgcttta aactgcaaga ggaaaaagac tcccactgaa
                                                                     1200
attectaagt ttgcccaagt agtgtaattg aagteettgt etggtcacac agtttaatte
                                                                     1260
tatttttgta agaacataat gggactgcat aacagagttc tatattacaa ttttgtgatt
                                                                     1320
attagtacag agtacageta tgctgtgact gttttggaaa gccgagtttt aacactatgt
                                                                     1380
tacatttttg tttaaagtaa gttaaacctt atataacata atgacatttg atttctggat
                                                                     1440
ttttcccatg ataaaaatta gggggataaa taaaattgtt actggaattt ctctqcaaaa
                                                                     1500
aaaa
                                                                     1504
```

```
<210> 3573
<211> 1309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1310)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) ... (173)
<223> similar to gi3928166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3573
ttttttagct tgttatgctt ttttttttt cccaaagcac tttaatgcat tcaccaaccc
                                                                       60
acagtecetg ecegetgget gggeaagaga ggeeageece catetggagg etectatgge
                                                                      120
ttcccacacc tagtgtgtcc aggaaggctg agcccgcaca cattcccatc aataggtgag
                                                                      180
gggcgtgaga atgaagaggc ggtcttcctc tttgcggatc cagcgcatca gcttatggat
                                                                      240
ggcactgacg gctgacgcct tggtccccag ggggctcgta acacatgtag agctcaaagg
                                                                      300
egectgteae ecaggecagg gaggtteteg ttgegggeee gtgtagtaaa ttggtettga
                                                                      360
gtggggcgag aggcattgtg ggcacgactg tgcaagtact ggtagaggcc cagcagccgc
                                                                      420
tectgetect etteactggt gtatggggee teaateteag ggetggtgaa gagteeegag
                                                                      480
ctctttgact tatagaggaa gtgacgcagg tcagggatgc ccacttgggc aacgctgtag
                                                                      540
tagggtgtgc gcagtgcctc tcgcagggcc aggtgggctc cgcgcttgcg aaggcgctcc
                                                                      600
tggaagegge ggeggeagte agagaetgea aagaagteet caeggteagt ggagaeaage
                                                                      660
agcaggcaga ggtcagtgtc aggétctagg taagagatgt gtgcgtggaa gaagccggct
                                                                      720
gcgttgaatt tgggcaggca cacgggcgtc caggcctcgc cctcgcgaaa ggacgaggag
                                                                      780
gaactaatga ggttgaagag caggtgcagg tcgatggggt gcagaaattg gtcctttcgg
                                                                      840
cgcacgagtg ccacgagctg gttgcgggcc agcaggatgg agaagaccag gctgcgcga
                                                                      900
cgcgcctgct gcaggctggc gctcacagtg tcgcgcacgg ccgccgccag gggcaggcac
                                                                      960
egigeegeee ceateaggaa geiggggiet egigeeatga geigeageag giiqteqqiq
                                                                     1020
atgcgctctg agcccgagag taggcgccgc aaatcatagt tctgcttctg ctggaagatg
                                                                     1080
tggctcagct gcgcaccggt aagaaggctt aggatctggt agtagatgta gagcagctcc
                                                                     1140
tgcgccaget cttgtgccga ctgccgcgta cgagccaccg ccactagcac cagcgggctc
                                                                     1200
cggcgcacga atactacctt gtagccatct ggctccattc cctgaattcc tccgcnctgt
                                                                     1260
ctaagggtca tctatggggn ntctatnngg gggggggggg gggggggg
                                                                     1309
```

```
<210> 3574
<211> 1445
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(733)
<223> similar to gi3043740 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3574
ggaattccag cagcagacag aagaagccag tctggagctt attaaactgg acatttctag
                                                                       60
aacattteet aatetetgea tttteeagea aggtggteea tateatgaea tgttgeaeag
                                                                      120
tattttgggc gcttatactt gttaccggcc agatgtgggt tatgtccagg gcatgtcctt
                                                                      180
catagcagca gigitgatet igaacitaga tacigcagai geetitatig eetitictaa
                                                                      240
cettetgaat aaaceetgte aaatggegtt ttttagagtg gaccatggee ttatgttgae
                                                                      300
ttattttgct gcatttgaag tattctttga agaaaatttg ccgaaattat ttgcgcattt
                                                                      360
caagaagaac aacctaactc cagatatcta cctaattgat tggatcttta ccttatatag
                                                                      420
taaatetetg eeeetegaee tggeetgteg tatetgggae gtgttetgte gegatgggga
                                                                      480
agagtteetg tteegeacgg ceetgggeat cetgaagetg ttegaggaca teetgaccaa
                                                                      540
gatggaette atteacatgg eccagtteet gacceggetg eccgaggace tgecegeega
                                                                      600
ggagctgttt gcctccatcg ccacgatcca gatgcagagc cgaaacaaga agtgggctca
                                                                      660
ggtactgact gcattgcaga aagacagccg ggaaatgaga gaagggaagt ccgtcctcc
                                                                      720
gacactgagg ctgcagcggg aattcgcact cggcaccaat cagagcccca tgccgcggcc
                                                                      780
cctctgttgt ttcagactga cacccgggca gccgagaaga acagacgctc tttaagtttg
                                                                      840
```

```
atteetaaca etggagttgg eettaaacaa aacaaacaca aaaaetttta aagaattaaa
                                                                      900
ccaaggetta gccttaagca gctcagtgga aggatgagct gctgcggacc acagccagcc
                                                                      960
actgcatctg ctgcacagtt gaacgatggg cagtggctca cccccactcc tttatttcag
                                                                     1020
Caaaagctaa ttaaattgta atgtttctat gtcaactact gggaagtatg ttacagtctt
                                                                     1080
agccaggatg catgagagat gttatttggg agacttgaga tgctttggct gatatttaca
                                                                     1140
tgttttcgat aagaaaggga tcgctgattg agttattgag atagtttttc cagagctgga
                                                                     1200
ggtcacgttt ctaaaactca cctacgaaag atagcattaa aggaacaggg gctctctgag
                                                                     1260
gatggccact gatgtgtgtt tgtggatacc tgggcatcga cccagcctgc aggtgagctc
                                                                     1320
tgggccatgt tgccttgaca cagtcacagt gtagaggctg caggtgcaca cgtgggctcc
                                                                     1380
agtgggactg cgctctggga gactgctccc tggcatcggt cctgcggagg tggaaagttc
                                                                     1440
gagag
                                                                     1445
```

```
<210> 3575
<211> 1610
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (430)...(1216)
<223> similar to gi886024 in the genepept database release 114, Rún with FASTXY 3.3t00, default parameters
```

```
<400> 3575
geeteeteet cagetegeet ggetteteae ttaggegtgt getttegett tgeageaaaa
                                                                       60
gctgctgctt ttcgcatcta aattcttgct ctgaaggtgc caagaacctg gaaaccggct
                                                                      120
gggagtgggg teteaceage etttggagae eeteetgage egtetggeaa eeagtgaega
                                                                      180
tacagagetg caeggaaegt catgaaggae caaegeetgg ttttecatag taaagttagg
                                                                      240
tcatctggtt atgcgtcagc accacatgta actatgtttt caccaaagac caacatcaag
                                                                      300
agtgagggga aaggatette aaggageagg agcagetgeg caegggagge atacceegtg
                                                                      360
gagtgcgctg tgcccaccaa gcccggcccc caggtcgctg ccgccccac ctgcacacgt
                                                                      420
gtatgctgca tccagtactc aggagatggg cagtggctgg cctgtgggtt ggccaaccat
                                                                      480
ctgttactcg tttttgatgc cagcctgact gggacacctg ctgtgttttc aggtcacgac
                                                                      540
ggggcagtga atgccgtgtg ctggagccag gaccggaggt ggctgctctc tgcggcccgg
                                                                      600
gacgggaccc tgcgaatgtg gtcggctcgt ggggcagagc tcgcactgct tctgatataa
                                                                      660
acagaagagc aagtccaagc tgatttgcag gctctccacg acgggtgcag tagacatgac
                                                                      720
cagtttatcg gcagtcaacg acttttattc ccacatcgta ctcgcagctg gccggaacag
                                                                      780
gaccgtggaa gtgtttgacc tcaacgccgg ctgcagtgca gcggtgatag tggaagccca
                                                                      840
ctcacggcct gtccatcaaa tctgccaaaa taaaggttca tcatttacaa cccaacagcc
                                                                      900
tcaggcttat aaccttttcc tgaccacggc cattggcgat gggatgagac tgtgggacct
                                                                      960
gagaaccctg aggtgtgagc gccactttga agggcatcca acccgcggct atccatgtgg
                                                                     1020
aatcgctttc agtccttgtg gacgattcgc ggcttgtggg gccgaggaca gacacgctta
                                                                     1080
cgtgtatgaa atgggctcaa gcacgttttc tcaccggctg gctgggcaca cagacactgt
                                                                     1140
cactggagtg gccttcaacc catcagegce ccagettgce acagetacet tggatggtaa
                                                                     1200
actocagete titetagetg agtaaccact gacetgtgag etgggtecag gaatgetgtg
                                                                     1260
aggaacaact taaaagtaag aagtagtggt tcatccatca gggggccaga agcagcaact
                                                                    1320
gtttttcata ttttgagact tgcctcagat ttcccccgtt tgcaagctcc tcccctctgt
                                                                     1380
gtgtgccatg tcagagtttt atgtctttct gctcctcaaa agggatcccc cttcattggg
                                                                     1440
aaaatggaaa tggcgtccag tacttctgca cagaatttgg taaagttaaa acaaaatatc
                                                                     1500
tttcaataaa acataatata gtatttgttt gataattaga gttggaagaa aaaagagaga
                                                                     1560
```

```
<210> 3576
<211> 803
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(804)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (611)...(383)
<223> similar to gi34203 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3576
cttctccggg tcgacccacg cgtccggcag aatcctattt ccaggaggag gactgtatcc
                                                                       60
ttttcttaat tacaggaaga aatttttaga actcttacag aaccattcat ttttttaatt
                                                                      120
gaagtatatt ttacatgtaa tagaatgtac agatcatatg gtttcagtgg ttttgacagt
                                                                      180
tgtatgtacc cgtgtaacca cctcagaaag caaaatgtag gaaatttctg tctcttcaca
                                                                      240
aaatttccta gaaccatcca aagtttacct tcataaatag gccttaattg tactaaaata
                                                                      300
agtatttgta tttattttt gaaggaaaat ttgtattatt ttaattattt ttatgtacag
                                                                      360
aacactcaac agtgtacatt taacccagtt tagcggcatg ttctttagcc tttgcctttt
                                                                      420
tgagettgge aacgtgegee acagaettgg gaeeegggae attgeegeee eegtgatggt
                                                                      480
gaatctcgtc gtatctgtcg ttgtaattgg tcctggacta gacagcccag tcttgccttc
                                                                      540
cccttggata atgcagtaag ggacccccat tttacgacat agggcaggca agaagacagc
                                                                      600
cagetggaag aaggeattag tggaagagtg tattttgace aaaageagta aatetcaaag
                                                                      660
ctagcttggt agcaagcgag agagagagaa cttctgagtg atcatgaaga caaaaagctg
                                                                      720
aacagtgagt ttttctcttc cttttttctg ggncagcatt tagagcattg cccagaggaa
                                                                      780
ggtaggcagt tggacagtgt att
                                                                      803
```

```
<210> 3577
<211> 1302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (34)...(669)
<223> similar to gi3806122 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3577
gagtacatta gtccagtgcg gtggaattcg cgcggcgtca agtgcgtgct ggtcggcgac
                                                                       60
ggcgcggtgg gcaagacgag cctggtggtg agctacacca ccaacggcta ccccaccgag
                                                                      120
tacatcocta ctgccttcga caacttctcc gcggtggtgt ctgtggatgg gcggcccgtg
                                                                      180
agactecaae tetgtgaeae tgeeggaeag gatgaatttg acaagetgag geetetetge
                                                                      240
tacaccaaca cagacatett cetgetetge tteagtgteg tgageceete atcettecag
                                                                      300
aacgtcagtg agaaatgggt gccggagatt cgatgccact gtcccaaagc ccccatcatc
                                                                      360
ctagttggaa cgcagtcgga tctcagagaa gatgtcaaag tcctcattga gttggacaaa
                                                                      420
tgcaaagaaa agccagtgcc tgaagaggcg gctaagctgt gcgccgagga aatcaaagcc
                                                                      480
gcctcctaca tcgagtgttc agccttgact caaaaaaagc cctcaaagag gtctttgatg
                                                                      540
cagccatcgt cgctggcatt caatactcgg acactcagca acagccaaag aagtctaaaa
                                                                      600
gcaggactcc agataaaatg aaaaacctct ccaagtcctg gtggaagaag tactgctgtt
                                                                      660
togtatgatg otggoaagac accoagaaag gotattttca gatgaaatcg atattagaag
                                                                      720
ctatattage tgaaacaact cettttactg cgtagaacet atategagag tgtgtgtata
                                                                      780
tgtattatag gaggagccct caattttatg tattctttct gcctttaatt ttcttgtttg
                                                                      840
tttgagetta gggatgagat acttatgeaa gatatttttg aagtaaatta aacattttte
                                                                      900
acatetetgg aaatttagag ttetagaeet etggttaatt tatatetaat atgaagaaga
                                                                      960
cacctctaat ctggatgtta agaatgaagt tctgctacat tataatgtac agaagagcaa
                                                                     1020
aagggaggaa cactatggtt aaccetetet tgattaaggg etaettaatg cacagtgeat
                                                                     1080
tatgtàcaca ggtcaaccat ggtaacaata gttcttagct ttgaaactçc atgcaaacca
                                                                     1140
tgcctttttt ttaaggagca aaaatctgag aaaaaaagtg agagacctct gcctacaaaa
                                                                     1200
cttcaaacca gtcacttttg tcaattgctt aattacccag ttacttatga tttaaaaaca
                                                                     1260
accaacagaa aacatcccac agactgtatg gcactctgta gt
                                                                     1302
```

```
<210> 3578
<211> 3466
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3173)
<223> similar to gi4314432 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3578
gagecaaggg agtecagget geegggget geagacatgg agggecagag cageaggge
                                                                       60
agcaggagge cagggacccg ggetggeetg ggttecetge ecatgeecca gggtgttgee
                                                                      120
caaactgggg caccetecaa ggtggaetea agtttteage teecagcaaa gaagaacgea
                                                                      180
geectaggae ecteggaace aaggttgget etggeacetg tagggeeacg ggeagetatg
                                                                      240
teagetteet eggaaggaee gaggetgget etggeatete eeegaeeaat eetggeteea
                                                                      300
ctgtgtaccc ctgaagggca gaaaacagct actgcccacc gcagctccag cctggcccca
                                                                      360
acatetgtgg gecagetggt gatgtetgee teagetggae caaageetee eecagegaee
                                                                      420
acaggetcag tretggetce gaegteeetg gggetggtga tgeetgeete ageagggeea
                                                                      480
agatetecce cagteaccet ggggeecaat etggeeceaa cetecagaga ecagaageag
                                                                      540
gagecacetg ceteegtggg acceaageca acaetggeag cetetggeet gageetggee
                                                                      600
ctggcttctg aggagcagec eccagaacte ecctecadec ettecceggt geccagteca
                                                                      660
gttetgtete caacteagga acaggeeetg geteeageat ceaeggeate aggegeagee
                                                                      720
```

```
780
totgtgggae agacateage taqaaagagg gatgeeecag eecetagaee teteeetget
tctgaggggc atctccagcc tccagctcag acatctggtc ctacaggctc cccaccctgc
                                                                      840
atccaaacct ccccagaccc teggetetec cectecttee gageceggee tgaggeeete
                                                                      900
cacageagee etgaggatee tgttttgeea eggeeaeeee agaeettgee ettggatgtg
                                                                      960
ggccagggtc cttcagagcc tggcactcac tcccctggac ttctgtcccc caccttccgq
                                                                     1020
cctggggccc cctcaggcca gactgtgccc ccacctctgc ccaagccacc ccgatcaccc
                                                                     1080
agcogttoco caagocacto ocogaatogo totocotgtg ttococcago cootgacatg
                                                                     1140
geceteccaa ggettggeac acagagtaca gggeetggea ggtgeetgag ecceaacett
                                                                     1200
caggoccaag aagocccago occagtoaco acotoctott otacatocao cotgtoatoo
                                                                     1260
teceettggt cageteagee tacetggaag agegaeeeeg getteeggat caetgtggte
                                                                     1320
acatggaacg tgggcactgc catgccccca gacgatgtca catccctcct ccacctqqc
                                                                     1380
ggtggtgacg acagcgacgg cgcagacatg atcgccatag ggttgcagga agtgaactcc
                                                                     1440
atgctcaaca agcgactcaa ggacgccctc ttcacggacc agtggagtga gctgttcatg
                                                                     1500
gatgegetag ggecetteaa ettegtgetg gtaacgeace ceteaceece tggacageca
                                                                     1560
gagaccctgc tgaattcctg gctccagctg taccctggct cactgtgggg cccgctgggc
                                                                     1620
ctctgtggct gggtgagttc ggtgaggatg cagggtgtca tcctgctgct gttcgccaag
                                                                     1680
tactaceacc tgecettect gegagaegtg cagacegaet geaegegeae tggeetggge
                                                                     1740
ggctactggg gtaacaaggg tggcgtgagc gtgcgcctgg cggccttcgg gcacatgctc
                                                                     1800
tgetteetga actgecaett geetgegeat atggacaagg eggageageg caaaqacaae
                                                                     1860
ttccagacca tcctcagcct ccagcagttc caagggccgg gcgcacaggg catcctqqat
                                                                     1920
catgagtatg ggctgggcct cgtgttctgg ttcggggacc tgaacttccg cattgagagc
                                                                     1980
tatgacetge getttgteaa gtttgccate, gaeagtgace ageteeatea getetgggag
                                                                     2040
aaggaccagc tcaacatggc caagaacacc tggcccattc tgaagggctt tcaggagggg
                                                                     2100
cccctcaact tcgctcccac cttcaagttt gatgtgggta ccaacaaata cgataccagt
                                                                     2160
gccaagaaac ggaagccagc ttggacagac cgtatcctat ggaaggtcaa ggctccaggt
                                                                     2220
gggggtccca gcccctcagg acggaagagc caccgactcc aggtgacgca gcacagctac
                                                                     2280
cgcagccaca tggaatacac agtcagcgac cacaagcctg tggctgccca gttcctcctg
                                                                     2340
cagtttgcct tcagggacga catgccactg gtgcggctgg aggtggcaga tgagtgggtg
                                                                     2400
cggcccgagc aggcggtggt gaggtaccgc atggaaacag tgttcgcccg cagctcctgg
                                                                     2460
gactggatcg gcttataccg ggtgggtttc cgccattqca aqqactatqt qqcttatqtc
                                                                     2520
tgggccaaac atgaagatgt ggatgggaat acctaccagg taacattcag tgaggaatca
                                                                     2580
ctgcccaagg gccatggaga cttcatcctg ggctactata gtcacaacca cagcatcctc
                                                                     2640
ateggeatea etgaaceett ecagateteg etgeetteet eggagttgge eageageage
                                                                     2700
acagacaget caggeaceag eteagaggga gaggatgaca geacactgga geteettgea
                                                                     2760
cccaagtccc gcagccccag tcctggcaag tccaagcgac accgcagccg cagcccggga
                                                                     2820
ctggccaggt tecctggget tgccctacgg cecteatece gtgaacgeeg tggtgecage
                                                                     2880
cgtagcccct caccccagag ccgccgcctg tcccgagtgg ctcctgacag gagcagtaat
                                                                     2940
ggcagcagcc ggggcagtag tgaagagggg coctetgggt tgcctggccc ctgggccttc
                                                                     3000
ccaccagetg tgeetegaag cetgggeetg ttgeeegeet tgegeetaga gaetgtagae
                                                                     3060
cctggtggtg gtggctcctg gggacctgaa tcgggaggcc ctggcgccca acagcctgtc
                                                                     3120
tectagtece ccagggecea tegggggetg gaggaagggg geetggggee etgagggtgg
                                                                     3180
ggtaggcaga tgggccaagg tgaccaccat tctgcctcaa tcttttgcaa gcccacctgc
                                                                     3240
eteteteetg etgeteetee agetgtatet geacetgeet etetgteetg geeaggggtg
                                                                     3300
gacaactggg gtcccccaaa actcagtcct ggcacctcaa ctgtgacaat cagcaaagcc
                                                                     3360
ccacccagge ecceatetgg gatgatggga gagetetgge agatgteeca atectaaagg
                                                                     3420
aggicatcca ttaggaaaaa aattctacca gacctcaaaa aaaaaa
                                                                     3466
```

<210> 3579

<211> 1900

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc_feature
<222> (1901)...(119)
<223> similar to gi4530577 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3579
tttttttttt ttgtgattat acgttttatt agactcggga ggggtatggc agggcttcat
                                                                       60
cagtgttcct tcaaattaaa aaaaaaatac aaaagctacg tagaaaacgt cagatcagac
                                                                      120
gactaaactt teeegaetea gggeeaagtt ettettgage etgegetete gggaegeetg
                                                                      180
egagteggte teegagtaeg ggggeggege gggegggtag taggeetett ceteeteete
                                                                      240
cttgtggggt ctcctcctct cctccgaccc cttcttcctc acagectcct ccagtagecg
                                                                      300
cccatcatag gggaggtccc cggacctgga gccgttgtcc cgagggtccc gggtacggtg
                                                                      360
gtggtgggac ctggggtcgg caggagggcg ctcccgagac ctgaagtcgt cgtaqtqqqq
                                                                      420
gtcccgggag cgtgggaagt ccctcgagtc gtcttggtca tagaggtcgt cccggctgcg
                                                                      480
gctccgcggg ggcatgtagg cccggcttct cctcccacca ttactcgtgg gagacctgct
                                                                      540
ccctgactcg gcggtgcctc gggcggggtg aggtcgtcca gggcgtccac gggagcgggc
                                                                      600
ceggggeege etggeeegee ageeceege ttgeetgete eetggeggge teetggteee
                                                                      660
atcccctggg actccggggg gagtggccac cccactcctc atcccggatc ggggtgaggg
                                                                      720
cagggccccg ggaaggccga gatcgccagt cgtcctcgtg gagggaggtg acttcactca
                                                                      780
tggcccgctc cacacggcca ctgggggggc caggtcgaga agggtcgaag ttggccagct
                                                                     840
cettetecat gtagtacagg accegcatgg agtegteetg etggetggee tquateetgt
                                                                      900
agccactgcg gacacctgag ctactcctgt caacgtctcc agggtatcct ccagggtacc
                                                                      960
cgttgtaggc agggcccatg ggaatcatag ctggtggggg tggggtcttg gcgggagaca
                                                                     1020
ggtgggcata ggtgctgggg gcataaatgc tgggaacacc tgaggtggct gctttqccqq
                                                                     1080
cggcatacag ggcctcgggg cagcagcact tgtctgggca gcaggggcac ctgacgtagc
agcagcaagt gtgcgggcag cactggcacc agcagatgcc caggaggagg aagatgagga
                                                                     1200
aggcagccag gcataccaca accacgaaga gccagtcttc tatgggcccc gcctgaaaac
                                                                     1260
caggiaagag cicagccacc ccigaggicc tcccaaggac gatgagctci gcgtaggcci
                                                                     1320
cattgttece etggaggtee tgggetgaga ceaeggagea gtaatacaca ecaetgteee
                                                                     1380
cccacgccgt ctggtcaaag gtcaggtcag catttccggt gatggtaatc ctccggccct
                                                                     1440
ggtagtaate teccagggte acagegttge cetgettggt ggeeacgace etgaeggtge
                                                                     1500
gcacgctgtc ctggcactca acgtaggggt tgtagcctgg gttcccggct gccagctggg
                                                                     1560
cattgagetg gttgtegaeg etggeegggg agaaggeate ggegatgegg teeeggeaga
                                                                     1620
aagacttgta cttccagatg acgatgggtt gcgtgggggt cgaggtcatc tggtaggtac
                                                                     1680
agggcagggt cacaggctgg aagaggatca ccacgtggta ggggttggac acggtcacct
                                                                     1740
ggatggccag cgccatcgcg gccgtctggg cgcgtctggc ccgcgcgtcc cttccaaagt
                                                                     1800
accttagggg gcgcggcgcg caccaaggcc aggaggggtg cacgctcctc cccttcccac
                                                                     1860
ttccgttcct tgtccctact ccaagtccgt cctgttqcat
                                                                    .1900
```

```
<210> 3580
<211> 1610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (344)...(1302)
<223> similar to gi2854163 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3580
ccactatcca tgtggtggaa ttcttctggc gccaggggcc gaccccacgt ctacctgcag
                                                                    60
cgcatccage tcaacaacce cacggagege gtggcegege tgcagactgt ggggcccact
                                                                    120
gccggcccag cccccaaggc cttcaccagt accctggaga aggtcggaga ccatcagttc
                                                                    180
etectetact caggeoggte eccgectacg eccaetgggt tggtgeacet ggtggtggtg
                                                                    240
gccgccaaga agctggtgaa ccgcctccaa gtggctccca agacgcagct ggatgagacg
                                                                    300
360
gccaaggage teaaggeget geaggaettg geaeggaagg aaatgetgga getettggae
                                                                   420
atgccagcgg cggagctgct tcaagaccac cagctcctct gggctcagct cttcagccca
                                                                    480
ggagtggaaa tgaagaagat cactgacacc cacacgccgt ctggcctcac cgtgaacctg
                                                                    540
acgctctatt acatgctctc ctgctcgcca gccccactgc tcagcccctc cctgagccac
                                                                   600
agggagcgag accagatgga gtcgacgctc aactatgaag atcactgctt cagcgggcac
                                                                   660
gccaccatgc acgccgagaa cctgtggccg gggcggctgt cctccgtcca gcagatcctg
                                                                    720
cagetetetg acetgtggag getgaceete cagaagegtg getgcaaggg getggtgaag
                                                                    780
gtgggtgccc caggcatect gcaggggatg gtgctcagct ttggggggct gcagttcaca
                                                                   840
gagaaccacc tecagtteca ggeegaccec gacgtgetge acaacageta tgcattgcat
                                                                   900
ggcatccgct acaagaacga ccatatcaac ctggccgtgc tggcggatgc cgagggcaag
                                                                   960
cectacetae aegtgteegt ggagteeegt ggecageetg teaagateta tgeetgeaag
                                                                  1020
gcaggctgcc tggacgagcc agtggagctg acctcggcgc ccacgggcca caccttctcg
                                                                  1080
gtcatggtga cacagccat cacgccactg ctctacatct ccaccgacct cacacctg
                                                                  1140
caggacetge ggcacacget gcacetcaag gccateetgg cecatgatga gcacatggee
                                                                  1200
cagcaggacc ccgggctgcc cttcctcttc tggttcagcg tggcctccct aatcaccctc
                                                                  1260
ttccacctct tcctcttcaa gctcatctac aacgagtact gtgggcctgg agccaagccc
                                                                  1320
ctcttcagga gtaaggaaga tcccagtgtc tgagtgaact aacagtcctg ctttcagcca
                                                                  1380
ccatttgcac aagacaccca gcactgaaag tcccgctgcc aggagcaagg gatcctttgg
                                                                  1440
aagcacccgc cctttgtgcc ttgttggggg aaaccggtga cgcagaagtg agtgtggata
                                                                  1500
caccagagtt tgcattggaa ggaatgagtg tcacgtgggg agggaagggg ccagtggacc
                                                                  1560
ttttgtaagc tttccactca ataaaatgaa cctgtatggc aaaaaaaaa
                                                                  1610
```

```
<211> 767
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (49)...(617)
<223> similar to gi5802258 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3581

```
<400> 3581
acagacacgc caagcttggc acgaggggt ggtgggggtg tgcaaaaagg gcccctgcc 60
tctcccacac tggctcatga ggctgcaccc ctgccegccg ggcgggcccg ccccaccacc 120
aacctcttca ccaagctgac ctccaaactg acccgaaggg ttaccctcga tccctctaaa 180
cggcagaact ctaaccgctg tgtttcgggc gcctctctgc cccagggatc caagatcagg 240
tcgcagacga acctgagaga atcgggggac ctgaggtcac aagttgccat ctaccttggg 300
atcaaacgga aaccgcccc cggctgctcc gattcccctg gagtgtgaag ctgaccagct 360
```

```
cgcgccctcctgaggccctgatggcagctctgcgccaggccacagcagccgcccgctgcc420gctgccgcagccacagccgttcctgctggcctgcctgcacgggggtgcgggcgggcccg480agcccctgtcccacttcgaagtggaggtctgccagctgccccggccaggcttgcggggag540ttctcttccgccgtgtggcgggcaccgccctggccttccgcaccctcgtcacccgcatct600ccaacgacctcgagctctgagccaccacggtcccagggcccttactcttcctcccttg660tcgccttcacttctacaggaggggaaggggccagggaggggattctccctttatcatcac720ctcagtttccctgaattatatttgggggcaaagattgaaaaaaaaaa767
```

```
<210> 3582

<211> 2350

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2352)...(515)

<223> similar to gi5817018 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 3582 ttttttttt ttcaaatgca gcatatttta atttgtttca aataaagcaa tatatgtata 60 tatatttttt cagaaaaaca ccagatgtta aattctacaa aagcgcatgt gtcctcagca 120 gatcatgttt gtctgattat taagaattct tttttgtaac attaactctc taaagacaat 180 caatggactg acatcactgc tacaacacag gttgctaact gagcctctga tcttcagcca 240 catcttgatt ttcctaataa tgagtaaata ctgcctggct aaaatgctgc aaagtcttga 300 tgagagaaag catcaacaga tcaagcaaag ccatgaaaat tatgaagcaa gctagagctg 360 attattagaa ttagtaaaaa tgattaagag aggatgacac aaccatacgg gatttgtata 420 ttctgattga cactcttttg gcagcgaatt gggtcagcac ctcgggcagg gaaccaaaac 480 tgagtgaaaa ctgctctttt tcctcctagc tcaggccacc aacgtcacag ccgggactga 540 gagaactgct gcatctgtgg aaacttctat tctcgtgggg cagagattgc actgtgaaac 600 cctaccgaca ctaccccgga agggcctggc ctccgaggtg tctgcagcgt gctgccttcg 660 ccggggcttt tcagaatggg ccggggcctc gggggtcttc atccccaagg aagcctcttg 720 attitiggea cogcettigt titigggeog gaageegtig tgeggetgte ttetgtgtte 780 gtggcggctg ttgccctttc ccagtggctc ggcttcattc ccactgccct gcgacttggc 840 aggcccattt agcctgttgt tatgatactg tggattaaat ctccgtcttt ggttagaaga 900 tecattetge ttgttggeeg geatggtetg gtgagagggg teggeggtge tggggagaet 960 gctcaccatt ttggggtttg ccgctttgcc ttcagagggc ttattgtgag tggatgattt 1020 tcgggaaaag ttactctgtt tcccagaggt tgctgcgtgc gcattcagca gaggcagcag 1080 ggagctgcag ggagttcttg aggaatagtt gttctttgga tgtgtaattt ctccgcagag 1140 catgatttgg gccttcagct gttcgatgtc acaggaaaac cgggcagctt tcccgagctc 1200 ctcgtcatat ttacgctcgc tgacaaagtg cttaatttct gccctgagtt cggccagctg 1260 catchetgee atetgactgg caaggteagt gagtetettt agttettetg etttettetg 1320 acgagcagtc aggatttcca tggcttcttc tttaacttta tccatttctg ccattaatga 1380 aacttetttg teaatgatge agttgtgtaa tteageaaag geagetttga tettetteae 1440 ggaactatee aettetteet taateatgae gegatateta gttagagaaa eggtgeageg 1500 ttgcaaatcc ttcactgatt tctcaatatt tgggcctctt ttctttgcca actcatctgg 1560 ctttatttca agatgagetg caggggtatt ggaettaaca ggagatgttt ttgeettagg 1620 cttgcttggg ttacaaggct gctcagctga ccactgtagg ccatctgacc tctctgttgt 1680 tecatgtata ggtttggggt teceatetaa ggatagttte tgttgeagta gtetgttgee 1740 ttctgtgacc cccacgaagt gcctttgaag gttcctcaag tatcgagatc tttttctcac 1800

```
gagggataag ggctggtttt tccqttagca gaatctgtgg acgagctgtc cttctcgcag
                                                                     1860
ccatteatgg ggccgttttg aatctgtggt ggctgcggct gcaggggccc tqcctcaggc
                                                                     1920
ctctccacct tgtctttagc atgctttgtt gccttgatgc tgcttggact tgcttctttt
                                                                     1980
tettttattg ttettettt tteetgteat attecattet tttagaactt gaattgeact
                                                                     2040
gccatccaca aaggcttgca cqqctttatc cacattaaaa tcaaactqtt qqaqcaccaq
                                                                     2100
gactatttca ttattgcttt tgttgggaac aactgatcta actgcataga tcttttcctt
                                                                     2160
gacattcaca tgagtattga gttcagccat cttgcttcta gtggaatagg ccctgggaat
                                                                     2220
ccacagcaat gttcctgaaa gcagcctggt ttctgaaqag ctctgaaaaa tcaqqcqcqq
                                                                     2280
aaaaagtget ggageteggg teageeettg gaaaceegae caaeeegggg tgtteegeeg
                                                                     2340
cctcctctgc
                                                                     2350
```

```
<210> 3583
<211> 3775
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (851)
<223> similar to gi63752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3583
atgagetgeg geegeeeece teeegaegtg gaeggeatga teacceteaa ggtggaacaa
                                                                     60
cetgacetae egeacetete cegacagett gaggegegtg ttegagaagt aegggegegt
                                                                    120
gggcgacgtg tacatcccgc gggagcccca caccaaggcg ccccggggct tcgctttcgt
                                                                    180
cegettteae gaceggege aegeceaaga egeegaggee geeatggaeg gggeggaget
                                                                    240
ggacggacgc gagctgcggg tgcaggtggc gcgctatggc cgccgggacc tgccccgcag
                                                                    300
ccgccaggga cgacgccacg cggcaggtcc agaggcggcg gctacggacg gcggagccgc
                                                                    360
agetaeggge ggeggageeg cageeceagg eggegaeaee geageegate eeggggteee
                                                                    420
agetgeteca ggtecegeag cegatetege tataggggtt etegetatag eeggtetece
                                                                    480
tacageegat eteettacag eeggtegege tacageeget eteectacag eagatetege
                                                                    540
tacagggaat ctcgctacgg cggatctcac tacagctcat ctggttacag taactctcgc
                                                                   600
tacageegat ateacageag eeggteteac tegaagtetg ggteetecae tagetetege
                                                                    660
tetgeateaa cetecaaate gagetetgeg egacgateca agteeteete ggteteeagg
                                                                    720
tetegetege ggtecaggte tteatetatg accaggagte eteceegggt atecaagagg
                                                                    780
aaatccaagt caaggtcgcg atccaagagg ccccccaagt ctcctgaaga ggaaggacag
                                                                    840
atgtcctctt aagaaaatga tgcatcagga agcaacgtga tggaggactt gggggaaaag
                                                                    900
gatcacatac tcagtctatg gaagcaacgt ccctggaaga agaggctgcc tattgaaaag
                                                                   960
gttgtgtcac acttttctac ctttttgcca gtttgaagct ttgcatcagg tggcaaaatt
                                                                  1020
cattetatgt geegttttgt tgttatteac attttattgt aacttaggag gtgaacqaec
                                                                  1080
taagattacg ttattgggtt tggatatttg aggcaaaaat ttattttat ttctatagtg
                                                                  1140
atgactgttt tggtttgaaa tgaacagatt ggtaacctaa tttgtggcct cctgactttt
                                                                  1200
aaggaaacgt gtgcagccat tacacacagc ctaacgctgt caagacattg cttcaacatt
                                                                  1260
1320
cctccaggtc taaaaggtag tgtgacccaa atttgtataa agatttttca tgtgaaagga
                                                                  1380
ctggggtttt agcaaacaca ggtctaatct cttttgtgtt tttgtgcacc aggcccggct
                                                                  1440
gcgtagcagt tgagtgatgc tggttagcta ttaaggtggc ctgttgcagt gcagagtgct
                                                                  1500
gagetgette etgttttett etgattgete etggggaaaa eaegeettgt eetgaagaae
                                                                  1560
aaatggctgt ccagtttatt aaaatgcctg tcaactgcac ttccagtcac ccaggccttg
                                                                  1620
```

```
cagataaata atggagcatg cagtgagcac atctagctga cgataatcac accttttccc
                                                                      1680
 ccgtcttttc tgaaaaattg taaatctgat catatcaaca tgtatgaact taaaatatgg
                                                                      1740
 agaatgttat ggaagaaata gtttataagt ttgttaagta cttataacat ggtttatctt
                                                                      1800
 tttgattatt aattttttac gctaaccatt gtttctgtag ttaaaattqt tttcttqqtq
                                                                      1860
 ttatcttttc tcagaataaa attagaaact tttgatggaa agtaggttgt tttattttct
                                                                      1920
gtatgacttt tggatatttg tacttttgag aaaattatta gcaccaagtg tttctcaaaa
                                                                      1980
 tataattttt aaaaaatcct taataggctt ttagctatgt gctttattgt tttatcacaa
                                                                      2040
 tgcagtttat ttgtagtttc tctctttttt cctcacacct atggtttttt tacttccaaa
                                                                      2100
attattttca aataatccat ttttggcttt catcattatc cctactagat gttatgtgtt
                                                                      2160
cttttgcaat tgtttctgct tataccttta ctagcaaagg gaaaaataac aatttggtgt
                                                                      2220
caatgatctg gtgacaatag gattacattg gagccaattg aataaattta ttctttcaat
                                                                      2280
catatggatc ttcattaata tttttgactg aattatcaat taaaaatatt tcattccctt
                                                                      2340
tgtgcagaaa ctgctaaatc cagggttcga ttcttgaatg aactggcaag gtggctqtgg
                                                                      2400
totgtagata tacatoccac attitgttgt tataacagtt agtagttagt attgctttca
                                                                      2460
tatatagact ccagaatcta aattttacga taatgacatt tcttctggtc atgacaaatg
                                                                      2520
taatatttta caaatataaa totacgtaga atocaaagac acacacagag cagtootgto
                                                                      2580
tgagaaataa aaaatcagga cacccatggc atcgtagtag cccctcgcgt ccagcaggtg
                                                                      2640
gcgaagggag gtgaggtata tttattaaat gggaccgagt gggacgggga cggggcagcc
                                                                      2700
ctaagggtag ggaagcattg tcaatttctg gggatagaat gagacccagg catagctgga
                                                                     2760
gtttgaagct ttgaagcaaa aatatctgta gaacatctta aacgtgacca aaatatgatg
                                                                     2820
ttaaaatcag caactettta tacgttaaaa actttgaaac etgtggeegg geatggtgge
                                                                     2880
tcacgcctgt aatcccagca ctttgggagg ccaaggcagg tggatcacct gaggtcagga
                                                                     2940
gtttgagacc agcctgacca acatggagaa accccatctc tactaaaaat acaaaattag
                                                                     3000
ctgggcatgg tggcacatgc ctgtaatccc agctacttgg gaggctgagg caggagaatc
                                                                     3060
acttgaaccc gggaggcgga ggttgcagtg agccgagatc acgccattgc actccagcct
                                                                     3120
gggcaacaag agtgaaactc catctctcaa aaaaaaaagt tcatcccaac tttcaagtct
                                                                     3180
acaaaaacat aatccaaatc taataacata gttgtaaatg agagcaacaa taaaaagtag
                                                                     3240
acatgggctg ggtgcagtgg ctcactcctg tagtcccagg actttgggag gccgaggtgg
                                                                     3300
gaagateeet tgageeeagg agttegagae aageetgggt aacaegggga gaeeegtett
                                                                     3360
tagtaaataa aaataaattt attaataaaa ctaaaaaattt aataataaaa agtggacatt
                                                                     3420
gttttttaaa atgtgtatag tatgcatttt aaagatagtg teeetgetgt ggaaaaeetg
                                                                     3480
aacagacagt atgatccaga atgtcaggtg tggagttggg cggacaagag tctgctgatg
                                                                     3540
aggacaacct aaaagagcac tggatttgga atcagaagac ctacctttga ttcctggctt
                                                                     3600
tecettaatg gecatgigat gitattaagt caeetetaaa getitagitt eeigteagte
                                                                     3660
aaatgttgac atgataccta cctcacaggg ttgttgtgag ggttaagtga aaggatcttt
                                                                     3720
gtgaaagtac tttttgaaat cattcagttg tcaataaagt tggataaaaa aaaaa
                                                                     3775
```

```
<211> 4460
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (28)...(3450)
<223> similar to gi5733391 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3584

<400> 3584
attgacccgc ctgcaggatt cggcacgagg ccgcttgaag atgccattga agatgaggaa

```
gaagaatgtc catcagagga aacagacatc atctccaaag gagactttcc attggaggaa
                                                                      120
agcttttcca cagaatttgg gcctgaaaat ctgagctgcg aagaagtgga atacttttgt
                                                                      180
aacaaaggtg atgatgaagg aatccaggag acagcagaat cagatgggga cacacagtca
                                                                      240
gagaaaccgg ggcaacctgg agttgagaca gacgactggg atggaccagg agagctggag
                                                                      300
gtgtttcaga aagatgggga acgaaaaatt cagagtcgac agcaacttcc agtgggaaca
                                                                      360
acctgggggc cgtttcctgg gaagatggac ttgaataata attctttgaa gacaaaggct
                                                                      420
caggicccaa iggigcigac igciggiccc aagiggitgc iggaigigac iiggcaagga
                                                                      480
gtggaagaca acaaaaacaa ctgcattgtg tacagcaaag ggggtcagct ttggtgtaca
                                                                      540
actacgaagg ccatctctga gggtgaagag ctaattgccc ttgtggtgga ttttgactca
                                                                      600
aggetacaag etgecagtea gatgaetete acagaaggga tgtaccetge acgeetgetg
                                                                      660
gactcaattc agctgcttca ctcagcaaga ctgccatggc ttctattttg cccacagcta
                                                                      720
ttgtcaataa ggatatattc ccttgcaagt cctgtggcat ctggtatcgg agtgagcgga
                                                                      780
atctgcaggc ccatttgatg tactactgac agtgggaagc aaagagaagc tgctccggat
                                                                      840
atacagagga aaatgaagac agtgcccatc agatttccag cctgtgccac ttaccacagt
                                                                      900
gcaccaagag cttttcaaat gctcgagctc tagatatgca cctgaattca cacagtggag
                                                                      960
tgaaaatgga agaatteetg eeceetggtg etagtetaaa atgeacegte tgtagetaca
                                                                     1020
etgetgatte egtgateaac ttteaceaac acetgttete ecateteaet caagetgeet
                                                                     1080
tecgatgtaa teaetgeeat tteggettee agaeteagag ggagttattg cageaceagg
                                                                     1140
agctccatgt ccctagcggc aaacttccca gagaaagtga catggaacac tctccaagtg
                                                                     1200
caactgaaga cagcttacag ccagccacag acttattgac cagaagcgaa cttccccaga
                                                                     1260
gccaaaaggc catgcagact aaagatgcga gctctgacac agagctggac aagtgtgaga
                                                                     1320
aaaagactca gctctttctc acgaaccaga gaccagagat acagcctaca acaaataaac
                                                                     1380
aaagcttttc ttacacaaaa ataaagtctg agccctctag cccaagactt gcctcatctc
                                                                     1440
cagttcagcc taatattggg ccttctttcc ctgtgggccc tttcctatct cagttttctt
                                                                     1500
tececcaaga tateaceatg gteeeteaag etteagagat ettagetaag atgtetgaae
                                                                     1560
tggtgcatcg gcgactgagg catggcagta gtagctaccc tcccgtcatt tacagccctt
                                                                     1620
tgatgcccaa gggggctact tggttttgag tgtaacataa cattcaataa tttggataat
                                                                     1680
tatctagtgc acaaaaagca ttattgcagc agccgatggc agcagatggc taagtcccca
                                                                     1740.
gagtteecta gtgtgteaga aaagatgeet gaagetttga gteecaacae tggeeaaace
                                                                     1800
tecataaace tteteaacee agetgeteat tetgetgate etgagaatee aettetteaa
                                                                     1860
acatettgca teaattette caetgtetta gatttaattg ggecaaatgg gaagggecat
                                                                     1920
gacaaggact tttccactca aactaagaag ctctccacct ccagtaacaa tgatgacaaa
                                                                     1980
attaatggaa aacctgttga tgtgaaaaat cccagtgtcc ccttagtgga tggggaaagt
                                                                     2040
gacccaaata agactacctg tgaagcttgc aacattacct tcagccggca cgaaacatac.
                                                                     2100
atggtecaca aacagtatta etgtgetada egecaegace etceaetgaa gaggtetget
                                                                     2160
tecaacaaag tgeetgeeat geagagaace atgegeacae geaagegeag aaagatgtat
                                                                     2220
gagatgtgcc tacctgagca ggaacaaagg cctccactgg ttcagcagag atttcttgac
                                                                     2280
gtagccaacc tcaataatcc ttgtacctcc actcaagaac ccacagaagg gctaggagag
                                                                     2340
tgctaccacc caagatgtga tatctttcca ggaattgtct ctaaacactt ggaaacttct
                                                                     2400
ctgacgatca acaagtgtgt tccagtttcc aaatgtgata ctactcattc cagtgtttcc
                                                                     2460
tgcctagaga tggacgtgcc catagatete agcaaaaagt gtttatetea gtetgagegg
                                                                     2520
acgaccacgt ctcccaaaag gctgctggac tatcacgagt gcactgtgtg caagatcagt
                                                                     2580
ttcaataagg tagaaaacta tctggcccac aagcagaatt tctgcccggt tactgcacat
                                                                     2640
cagcgtaatg acctgggtca actggacggc aaagtgtttc cgaatccaga aagcgaacga
                                                                     2700
aacageeetg atgteageta egaaagaage ataataaaat gtgagaaaaa tgggaatttg
                                                                     2760
aagcagcett ceeceaatgg aaacttattt teateceaee tagcaaceet geaaggettg
                                                                     2820
aaggicttta gigaagcigc tcagcicatt gctacaaaag aagaaaacag acattigtit
                                                                     2880
cttccacaat gcctttaccc tggagcaata aagaaagcaa aaggagccga ccagctttct
                                                                     2940
ccatattatg gaatcaagcc aagtgattat atttctggtt ctcttgtcat ccataacact
                                                                     3000
gacatcgagc aaagcagaaa tgcagaaaat gaatctccta aaggccaggc ttcctcaaat
                                                                     3060
gggtgtgctg cgctgaagaa agattctctg ccattgttgc ccaaaaatcg aggaatggta
                                                                     3120
atagtgaatg gtggactgaa acaagatgag agacctgctg ccaacccaca gcaagagaac
                                                                     3180
atttcccaga atcctcagca cgaagacgac cacaaatctc cctcgtggat ctctgagaac
                                                                     3240
ccattagctg ccaatgagaa tgtctcacca ggaattccct cagcagagga acagttgtct
                                                                     3300
agtatagcaa aaggtgtgaa tggttccagc caggctccaa ccagtgggaa atattgccgg
                                                                     3360
ctatgtgata tccagttcaa caacctttca aactttataa ctcacaagaa gttttattgc
                                                                     3420
tcatcacatg cagcagaaca tgtcaaatga actaactaaa catcagtcac ctttggtatc
                                                                     3480
```

```
agtgtttagt atgttgttct aaccaqtcca gaaaaaaaaa taagctgttt qaattacatc
                                                                     3540
tgggcaatca ggagataatt cattatggct gagttgaaga cttaaggtgt aatttcatta
                                                                     3600
cagtccatta gtaaagtgta ttattggtgc cattttcaaa aaaattaatt tattttacca
                                                                     3660
gcagtattca tagctgtggt tatgttattt tttatttaaa aactttatat taaagtcatt
                                                                     3720
tgtaatgtta ttgtatagtt attgtgtagc acatatggtt tgcactgtat agtagctttt
                                                                     3780
aaagaaaata gtcacaatac agaaaagcat tttagaaata gcttcaaaag cacttgtgta
                                                                     3840
tettgatttt ttettatatg etgttgeaga tatatgtata tgetaaaata taaettgeaa
                                                                     3900
agatgttcta aatacacatg ctataagttc gccttaagat ttcaattctt ggataatcag
                                                                     3960
getetgtttg caetttatat tttageagat acagtetett agteactagg etttgeattt
                                                                     4020
gtatgtaget gtatgtttcc gtccattttc ttaatcctga acctgtatgt taaatgaaga
                                                                     4080
tggcaatttt tttcttgtat agtacttgta ttttctttcg ctgatgcagc tctgtctcaa
                                                                     4140
tttttaaacc tttgctgtta aatgcaatac tttataaaga atgaacaaaa ttactggaag
                                                                     4200
cagtattgta agtaatgagg tagtattaat cagttttatc ttttgaaagg cacagtctaa
                                                                     4260
atcgaaaccc taaactcaat gctgcaagta tgaatttaat tcatatataa gatctattta
                                                                     4320
aatataagag tagcaatact gcacctggtg atcacaaaga taatgttcta cttctgatag
                                                                     4380
aaataatttc tcaacaaatg ttgttactat gcactgtata tggatggaat aaaattccag
                                                                     4440
attgttggag aaaaaaaaa
                                                                     4460
```

```
<210> 3585
<211> 1157
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(821)
<223> similar to gi4138016 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3585
ccaegettgg caegaggtgg teggetacce ggaetteetg etgaaacceg atgetgtgga
                                                                       60
caaggagtat gagtttgagg tccatgagaa gacctacttc aagaacatct tgaacagcat
                                                                      120
ccgcttcagc atccagctct cagttaagaa gattcggcag gaggtggaca agtccacgtg
                                                                      180
getgeteece ceacaggege teaatgeeta etatetaece aacaagaade agatggtgtt
                                                                      240
eccegeggge atcetgcage ceaccetgta egaccetgae tteccaeagt etetcaacta
                                                                      300
cggggggcatc ggcaccatca ttggacatga gctgacccac ggctacgacg actgggggg
                                                                      360
ccagtatgac cgctcaggga acctgctgca ctggtggacg gaggcctcct acagccgcct
                                                                      420
cctgcgaaag gctgagtgca tcgtccgtct ctatgacaac ttcactgtct acaaccagcg
                                                                      480
ggtgaacggg aaacacacgc ttggggagaa catcgcagat atgggcggcc tcaagctggc
                                                                      540
ctaccacgee tateagaagt gggtgeggga geacggeeca gageaceeae tteccegget
                                                                      600
caaagtacac acatgaccag ctcttcttca ttgcctttgc ccagaactgg tgcatcaagc
                                                                      660
ggcggtcgca gtccatctac ctgcaggtgc tgactgacaa gcatgcccct gagcactaca
                                                                      720
gggtgctggg cagtgtgtcc cagtttgagg agtttggccg ggctttccac tgtcccaagg
                                                                      780
acticacciat gaaccotgoc cacaagtgit cogtgtggtg ageotggctg cocgotgoa
                                                                      840
cgccccact gccccgcac gaatcacctc ctgctggcta ccggggcagg catgcacccg
                                                                      900
gtgccagccc cgctctgggc accacctgcc ttccagcccc tccaggaccc ggtccccctg
                                                                      960
ctgcccctca cttcaggagg ggcctggagc agggtgaggc tggactttgg ggggctgtga
                                                                     1020
gggaaatata ctggggtccc cagattctgc tctaaggggg ccagaccctc tgccaggctg
                                                                     1080
gattgtacgg gcccccctt ccctgtgttc ttgctgcaaa gtttggtcaa taaatccctg
                                                                     1140
ccctgttaaa aaaaaaa .
                                                                     1157
```

```
<210> 3586
<211> 2708
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2707)...(1603)
<223> similar to gi2623162 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3586
aaaaccatgt tggcatcaat gagatatgat gtgccattct aaaagctttc tctcctgatt
                                                                       60
gctttagaaa ttaggatctg gaaggacttt aacatgaatt agttttttcg catgtttata
                                                                      120
ggccagagac ctgcccaggc aatgaactga tagatttaaa taaatattcc cctcctaact
                                                                      180
ttttccttta getacagaec agacagteca aacacaaage teagaattee agetecaact
                                                                      240
tatttactca gtgaatttat tgtaaaaata aagaaactca attattccag ttaatggatt
                                                                      300
tcacgttaaa tagtttaact ttcaatgggc tttctgaaga gctgttcata ggatgatatt
                                                                      360
tggaagagtc ctttccttaa ggaaaaaaag ggtcgaacaa taaataaagc agttacttgc
                                                                      420
gttaacggtc acgttatttc attaaaagag aggaggagca gaaatctatg acatagttgc
                                                                      480
ccaacatggc atttatctgc tgcaacagaa agctgtaaca ctggcgggca tttcacagta
                                                                      540
tttgcgcata gtaaacttct gccattgtta aagtctgagt tagaattatc aatgaattct
                                                                      600
tttttttttg tctttttaaa ttttcttgat tttaaaaaat gtatttgtgt tttgcaggtt
                                                                      660 ...
ggaacgcaaa cccagtctgg ccacgtcccg tgaagttgtg gacaaaatgt ttcagtttct
                                                                      720
gttcacctct gtgcgtgtgt gtgtatgtgt tgtgtgcatg tgtgtgtgtg tgtgggggtg
                                                                      780
ggggatgggg taggtatgtg cttttggctc atgtttgtga tgataactga agtcttttgt
                                                                      840
gggtccgacc tgttgtaggg tgtgggggaa agtgaaggaa gagaatgaag gtgagtcccc
                                                                      900
gccgttgcaa accttcacca aaccacgcgg cccagttttc gtgagtaccc ctgtgtccca
                                                                      960
gagaggagga cccagcgtcc tcggctctgc cgcaggcctt cttggtctgg tgggtactcg
                                                                     1020
aggeagttga gaacettget gagetgageg ggeacetege ettgeetget ggttegaeae
                                                                     1080
ctgaccccct ccccctggga ttatgtacac gcatcattgg gcttcatgga tgtggaaagg
                                                                     1140
ggagcaaagg atggtttggg gggtacgtcc ggctttagcg agggcgtacg cttcagccc
                                                                     1200
gaccttgtca gtgagttgta ggcgttgagg ctgggctgcc tcgagacagt cacggcctgg
                                                                     1260
ccagatggct gggagctgtg cacctggatg gagtccaccc tctgcggggc gggcggcggg
                                                                     1320
ttgtctcccc tgccaaagct ctggtttctg gagaggtgag aggaattgga ggagttagtg
                                                                     1380
ttgtttettt tgagagtggt ggeetggtgg ettetegtga gegagttegt ggggtagete
                                                                     1440
ctcttatagt caaccccgta ggaagaggag tggtgcattt ccagccgctt gcttagaccg
                                                                     1500
gtctgagaca gggaggctcc cgggggaccc agggaggcct cccgctgtgg aactttgggg
                                                                     1560
ggcaggctgt ccaggttctc cacaaggttc accccatggt tgggactctt gctgctgaga
                                                                     1620
tgttccttga tggtcttata ctccagtgtg gcggcctggt cctccagcgc catctgggcc
                                                                     1680
acctegetea tittgggetg gtecaegtae teatgetggt agecetgetg egtgatggge
                                                                     1740
aggaccacca cgctggggat gtggctgggg gaggcccgca ggggcaggtc ccgtgggaat
                                                                     1800
cacaggggga gcccatgggg ggcatgtcct ttgtgcaggc attgatgagg ttctggttcc
                                                                     1860
teteceaete geggetgeeg eggetggget teegettetg etgeagegtt ggggttgaet
                                                                     1920
ctggggtggg gagggccgtc aggtccaggt ggtgctggtc tgctttaatg agcatcttgg
                                                                     1980
ccgtgttgcc gggagtggcg agcttgccgt tgtgcatgag tggcgtgagg atggcctccg
                                                                     2040
getttgggte tttggattga gtgteeccaa agaggeeget gagettggtg aegetgetea
                                                                     2100
tggagccccg gcgcgagtgg gtgagctcct tctccttgcg ctgcaccaca gccacgtctt
                                                                     2160
tgcgccgatg atcacagacg cagtagacgg tgatgcccga gaagacggcc cccatgacga
                                                                     2220
```

```
aagccaggat gactgcaatg gccaagaggg tgacgggaac cagctggtcg tggcctttga
                                                                     2280
ggtaactttc ccgaatcact ccattcttgt cttggtgatt atgggaagac actgccccca
                                                                     2340
aagggtetgt getgteaggt gagteaagea gatgetteea gteeageatt ceteecetag
                                                                     2400
actcatacce etettgagee gregaatetg atgtggttgt getgggeaag agggaactgg
                                                                     2460
aatgeeeatt cagtgeeaca aaggaattgt gaeagteeee cagaeeatet gtattgeeae
                                                                     2520
gctctatgtc ctgctcaaaa gtcagtctgc tgttgggtga taaatggctg caggcaccac
                                                                     2580
cttcctttat ccatccacaa tatgggtctc tggaggcaat acaggttttt ttacacttcc
                                                                     2640
catgtcgttc acaccggcca aggggaacct ttatcacaca ggtagagaac gcctcgtgcc
                                                                     2700
gagattct
                                                                     2708
```

```
<210> 3587
<211> 1754
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1756)...(1183)
<223> similar to gil657835 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3587 ctgttcctat cacatctcac tcccagtagg tgttgcattt ttggatgaat ctaatagttt 60 tcctttattt tcacttttca cgaggtgaga ttagatgtct gtgtgaaatg aatgttttac 120 tatggtccta cacataatgt taaaattaca aagtaaaata atgaggtaca agatatttat 180 tgacaccaaa atacatacaa gtatttccga acaagatgaa aatatctcct ggtttctcac 240 acagagaccc atactactcg gaaggcagga tatgccagtt ttcctttgtg gaaaagtgta 300 tecaggeage aaaettaatg aggagtggge agttttgtee ttaaaaaaet geagggaagg 360 gttctttcca gggagtggta gtttggtgct ccagggtgct ggcagggaca ggacagctga 420 ttgatagaag tgagggctct aacaaagttc actatttaca tcaaaatgac ttgatgcggg 480 ctctggggcc tctgggcctt tgtttaaaag atgatgctgg aaccatgtct ttgaaacccc 540 accagcatta gggcttaggt actaagcaag teegggactg tateeeggge tteagtgact 600 gacccaatca caacacgtgc ccagttgaat agtgactgta acagatcacc cacttttaaa 660 ggctccccag aagaaatgag cacacaaaat ctagctgcag aaaagccctt tcccacatcc 720 tectetgeet atgtgggeae tgaggeaaet geeetgaetg tgaaagttea eeeettgtga 780 ataccactet ttaaatecaa attgetteat tgagatetta aaaggaatet tgaaatecag 840 atgattgggt agaaaatgtg acatggaatt ttactctagc gtcaaaacaa cttttaaaat 900 agtcctgctt attcaagtta gtttctcctc cagaaatctg aaattagatt tgataagtta 960 aagattatac aaacagggtg gctttcaata atttaattag actcatgcca aaaaaatgag 1020 cttccaggaa atattaaata ttattcttaa agcaatttgg acacagacaa tcacacatac 1080 1140 aatgacaaca caattagagg taaacaatat tttctttggc tccatctcca gtttccccat 1200 cttgtctggt cattgtcctt gtcggtagat ttagctttgc ttctgttata aacgcctgca 1260 gttgagggcg gtgtgaattt gagtcatggg gggttgggga ctcagtgtgg gaggtgtcca 1320 aatcattttt acaagaatcc ttgctgcttt catggaaagg aagtatctga tggccggaac 1380 cagcggctgt ccacagtttg tgactgacat tcgaaggctg agaagggtcc accttgaggt 1440 ctacttgatg ttcactagtc ctcaccaagt cagaatgaga ttgagttgta gggtaagtgg 1500 catcctgatg gataactgat ggattcagtt tgttgaaagt gttaaatgac atttgtacta 1560 aagetteatt gatgaagaat gagtttteat gacataaaet eteagatega ttaagtteea 1620 ttacctcggg gccacccgga aggagcaccg cgggcaggct cctctgccgg ccgtgcttcc 1680

```
<210> 3588
<211> 2018
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (53)...(453)
<223> similar to gi5441607 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

<400> 3588 attgcccgcc tgagaattcg gacgcgctcc ggctcgtagc ccacagccca ctgccggcgg etgggegetg eegaggeteg gggegegege agttggegte tgeeagtgee aagaetgtge 120 egecceaca geegaggege gaaaggggga egeeeggeet etgggeeget geettegett 180 tetettegtt gitgegaacg cegteegete aggaggegee cegegacegg egegatgagt 240 gccaacgagg accaggagat ggaactagaa gcattacgct ctatttatga aggagatgaa 300 agtttccggg aattaagtcc agtttctttt caatatagga taggtgaaaa tggtgatccc 360 aaagcettet taatagagat tteetggaca gaaacatate eecaaacace teeaatteta 420 tctatgaacg ctttttttaa caacaccata tcatcagctg taaagcagag tatattagcc 480 aagctacagg aagcagtaga agctaatctt ggaaccgcta tgacctatac attgtttgaa 540 tatgccaaag acaataaaga gcagttcatg gagaatcaca atcccatcaa ttccgcaaca 600 tegataagea atateatete aattgaaaet eetaataeag eeccateaag taagaaaaaa 660 gacaaaaaag aacaactttc aaaagcccag aagcgtaagc tggcagacaa aacagatcac 720 aaaggagaac ttcctcgagg ctggaactgg gttgatgttg tgaagcattt aagcaaaact 780 ggctctaagg atgatgagta gcacttggaa tttgagacaa ggaaagagca ttctttaaag 840 agtaaaactg ggttcaaaat ctttcattac tattttctgg tattgaggcg actttttata 900 aaacacaatt ttttgtatgt ttcttacatt aaaaaggttg taagttgaaa gttcatgaag 960 agatettgtt gtattaaatt atttteacaa aettgeetta ataaaaggtg aaaatgttae 1020 tgtttagtat actttatgaa gccccttgag ctttataaat ggacaggcat ggggaataag 1080 aatcagtgtt aatttaaatg atcttatcct ggtggatgtg ctattttctt aaaggagtat 1140 gaagccettt tcaaactate atcecagtgg ageggagtae teagtgaaca gttactecat 1200 agtgcaatce atattaatag gettettete ttaagtette atetettett ttgettaatt 1260 actgaaccgt aaattacttc agagaaattt aaatgctggt atttgaactt tatacatgat 1320 actititigia gitticitita attititgaaa gatgaactgc ticcitittaa taaattaata 1380 totatttata cttttctctt gatttgggtc aagatgtttg atcatgagtg ctttgagtgg 1440 tatgtggaat aggagaatat aaaaacaaat ctgccaaata cactagaaag cattttagta 1500 agaaatgctg gccctttctt aaaacatttc tcttgcatat accaggatgg gagtaaaaga 1560 tgccttaata tttagttttt gtattgttgg agacattgat tttaataaaa tcctatttat 1620 ctgctgttgt gtgcttttag ttgttggata actgaggtct cctaaatggt tcaacataaa 1680 accacattte aagtettgtt tetttttgga gtgtetttte aagtatteaa atgtatttet 1740 caacctgage atcttttaa teatataeat gggagtettt taaatgetga actgttacae 1800 atgettgatt taaaaataat aataatagag gaaactattg gtetagttgt gecaagaaaa 1860 gtttctgatg tttatgtgtg atgtacagtg attttgtata tgcgcccagc tttaagaaca 1920 cataaaacta ttacgtctgg taggaagatt gttagtgcct caagttacac ctgtgcaqct 1980 tgggtctgag ttttgataga acagtaaaca tttaaagc 2018

```
<210> 3589
<211> 1490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1493)...(1133)
<223> similar to gi4884100 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3589 ttttttttt ttaaggatga gaagagattt tagttattca gtgttttcat gagtttcaac 60 atagggatat agatacaatc agcttcttac atagtttact atctggggag agaacatgaa 120 agacactgtt taacagtgca aataattcca gggaataaat atacatgaat gtgtttttc 180 aaaaatacca ggttctttat acaaatgtat aacctaaata ctgatcccca tagtgggggt 240 gggttgtaac tgaaaggggc tttgaggaaa agggetttgg aataaaacta ggtcatccac 300 cctagcccaa agatcccttt cccagccagg cacaaaaggg aatttgttaa gggaggaaca 360 gaggtttaac tgttcaggta tctttcctaa ttctggtaaa tttttcccca agttttgaaa 420 aatacccatg gaagaatcct taggaatgcc cagtaaccca gggaatgggg atatttggca 480 tatccacaac atcctacagg ctataataca ctccgaatgc cttctcaatg tggggaagta 540 tgagaagtta gataattete etagtgtetg getteetttt tetttgeegt teeeteteat 600 acgttcaatc accctgtgtt acaggacaca cagtaagtag tgggaaggtg ttaagacttt 660 gacagcaaag caaggtcaga ggtagagggg aatgtttaac caatcaatgt tcaaatataa 720 gctactcaat gaagagtttt aggtttaaag agcgagaata ttcaccatta ctgagaaatc 780 taaagtttet eatteaattt egeattgeae tttgetaeea caaactaaat gggtgtaeat 840 ttttgagtgc tgatttatta ctcaaaggtt tgaatttgga gactgaaaca aaccatgctt 900 tatctgtgta ctttgagaaa atccatccac aagaaaggag ccaagcgtca gtttccaatg 960 gggggaacat teteatggag gtaetgtaag getaagtetg teeaetteat ttettgttet 1020 ttgacagatt ctgtggtgcc accattgtct tgttcaggtt caggaagctc attcagtggt 1080 attgcgacat cctcataagg cagcttgtct tctcgccaag catcatcaat caaatccaag 1140 atcettecae etetetgaae eteaetgtee atttteetge agetttgate ttgteaaate 1200 gtacgacagg ccgtccctca gctgcggctt cctgcctaca ggcaggatgt accaaacgtg 1260 gaagcggaga cggggaggtc tgggggtgcc acgcaagtcc ctttcctccc gacacgagtg 1320 cagtaaagaa aaacggttat gagcgtaaag tgacagcctc ggccgatggg aatagggggr 1380 aagteegaea etgageaaeg aaegeattee egegeeteea aaaeetagge egggggeget 1440 ggaaaccctt accggcaccc ggccaccgcg gcagacgctt gctcctgcca 1490

```
<210> 3590
<211> 2177
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(977)
```

```
<400> 3590
eggettegtg gaagegggeg aggagtgtta etgegtttee tggeeaggag tgeegegaee
                                                                       60
tetgetgett tgeteacaac tgetegetge geceggggge ceagtgegee cacggggaet
                                                                      120
gctgcgtgcg ctgcctgctg aagccggctg gagcgctgtg ccgccaggcc atgggtgact
                                                                      180
gtgacctccc tgagttttgc acgggcacct cctcccactg tcccccagac gtttacctac
                                                                      240
tggacggctc accetgtgcc aggggcagtg gctactgctg ggatggcgca tgtcccacgc
                                                                      300
tggagcagca gtgccagcag ctctgggggc ctggctccca cccagctccc gaggcctgtt
                                                                      360
tccaggtggt gaactctgcg ggagatgctc atggaaactg cggccaggac agcgaggcc
                                                                      420
actteetgee etgtgeaggg agggatgeee tgtgtgggaa getgeagtge cagggtggaa
                                                                      480
ageceagect getegeaceg cacatggtge cagtggacte tacegtteac ctaqatqqce
                                                                      540
aggaagtgac ttgtcgggga gccttggcac tccccagtgc ccagctggac ctgcttqqcc
                                                                      600
tgggcctggt agagccaggc acccagtgtg gacctagaat ggtgtgccaq agcaggcqct
                                                                      660
gcaggaagaa tgccttccag gagcttcagc gctgcctgac tgcctgccac agccacgggg
                                                                      720
tttgcaatag caaccataac tgccactgtg ctccaggctg ggctccaccc ttctgtgaca
                                                                      780
agccaggett tggtggcage atggacagtg geeetgtgca ggetgaaaac catgacacet
                                                                      840
tectgetgge catgetecte agegtectge tgeetetget eccaggggee ggeetggeet
                                                                      900
ggtgttgcta ccgactccca ggagcccatc tgcagcgatg cagctggggc tgcagaaggg
                                                                      960
accetgegtg cagtggcccc aaagatggcc cacacaggga ccaccecetg ggeggegtte
                                                                     1020
accccatgga gttgggcccc acagccactg gacagccctg gcccctggac cctgagaact
                                                                     1080
ctcatgagec cagcagecac cetgagaage etetgecage agtetegeet gacceceaag
                                                                     1140
cagatcaagt ccagatgcca agatcctgcc tctggtgaga ggtagctcct aaaatgaaca
                                                                     1200
gatttaaaga caggtggcca ctgacagcca ctccaggaac ttgaactgca ggggcagagc
                                                                     1260.
cagtgaatca ccggacctcc agcacctgca ggcagcttgg aagtttcttc cccgagtgga
                                                                     1320
gettegacce acceaeteca ggaacceaga gecaeattag aagtteetga gggetggaga
                                                                     1380 -
acactgctgg gcacactctc cagctcaata aaccatcagt cccagaagca aaggtcacac
                                                                     1440
agcccctgac ctccctcacc agtggaggct gggtagtgct ggccatccca aaagggctct
                                                                     1500
gtcctgggag tctggtgtgt ctcctacatg caatttccac ggacccagct ctgtggaggg
                                                                     1560
catgactgct ggccagaagc tagtggtcct ggggccctat ggttcqactq aqtccacact
                                                                     1620
cccctggagc ctggctggcc tctgcaagca aacataattt tggggacctt ccttcctgtt
                                                                     1680
tetteceace etgtettete ecctaggtgg tteetgagee eccaceeca ateccagtge
                                                                     1740
tacacctgag gttctggagc tcagaatctg acagcctctc ccccattctg tgtgtgtcgg
                                                                     1800
ggggacagag ggaaccattt aagaaaagat accaaagtag aagtcaaaag aaagaćatgt
                                                                     1860
tggčtatagg cgtggtggct catgcctata atcccagcac tttgggaagc cggggtagga
                                                                     1920
ggatcaccag aggccaggag gtccacacca gcctgggcaa cacagcaaga caccgcatct
                                                                     1980
acagaaaaat tttaaaaatta gctgggcgtg gtggtgtgta cctgtaggcc tagctgctca
                                                                     2040
ggaggctgaa gcaggaggat cacttgagcc tgagttcaac actgcagtga gctatggtgg
                                                                     2100
caccactgca ctccagcctg ggtgacagag caagacccct gtctctaaaa taaattttaa
                                                                     2160
aaagacatat tacactt
                                                                     2177
```

```
<210> 3591
<211> 489
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc_feature
<222> (490)...(41)

<223> similar to gi4096055 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3591
ttttttttt ttacagattt tggcttttat tctggccatc acacatctac ttctaagaca
                                                                      60
acacagaccg gcagtacccc atcccccatg accactgtca caaccccaat ttcctcagcc
                                                                     120
ccctcctccc accccacccc ttctgccaag ctccccgtat gggggctctg cctacacctc
                                                                     180
accocgggca tgcagcatga agtgcccgtg cagctccccc aggttgtcqa aggaatcctc
                                                                     240
acatteegta cagtggtagg tteecteete etectettee teeteeteet eeegeecage
                                                                     300
tggtcggccc tccccagccc gaggtggttc ctcctcttcc tccccgaggg ccctqccttc
                                                                     360
aggggetggt getteetggg gggetgtage agggeageag aacetgeagg gtqqqqttee
                                                                     420
cggtggggcc tccccaaggg gtgagcggcc acagagctgg caaggctggg ccgggggctg
                                                                     480
ggctgcacg
                                                                     489
```

```
<210> 3592
<211> 933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (875)...(252)
<223> similar to gi212659 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3592
ttttttttt ttaacgggaa aggatgagtt acgtttattg ccccatccct tcactgaatg
                                                                       60
tttacattaa caaacaccaa agagcaaact gggcttccta cactgggcca tgcagaggac
                                                                      120
aggccaagaa actccacatc ataacagcct cctgatgcct gggcttggct ggagctcaca
                                                                      180
tgaggtgctt tgatttcttc tgcagactct cggtgatgga tgctacaact gacttatcat
                                                                      240
ctttgtcata gacggtgagc gtgcagctgc tgcggctcct tgcccagctc gttctccacc
                                                                      300
agcacgctgt aatcgccgct gtccttgagc gcgcaggtgg ggatgacgag ggtgcacacg
                                                                      360
ccgctggtgg agttgtacca gaacttggag ttggccgtga tgttgacgtc gcccttgtag
                                                                      420
agggtcactg tgggccgcgg gttcccaagg aaggcgcagg tcatggtgca gtcctggccg
                                                                      480
cggagcaccg tgtgtggctt gaggggcgtc acgaagcgcg gcgcgtggcg ccagtccttc
                                                                      540
ttctcgtagg gcttgagctt ggcgctcagg tcctggatct ggtccttatt gatgagccag
                                                                      600
gtgtccctgg agtcaagtgg ctcactgtca ccgatttcat tccgagccac cactctgaag
                                                                      660
tagtacttee tgeetgggag cageecegte actgtgtact tgttgetgaa gacaegeteg
                                                                      720
gctgccgtgt accaggtggc tgtgcttgca tcccgcttca tgatgatgta gtgagcctca
                                                                      780
ccgtcctcct gcacatctgg gctgtggttc caggtcagag tcactgtgtt ggggacttcc
                                                                      840
tcaaacaacc gtaggtttgt ggggggccga gggaaatctg gaagagttgg aagatctgtc
                                                                      900
agcgaccttg gggcacctga agtattatgt ccc
                                                                      933
```

```
<210> 3593
<211> 1779
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (146)...(955)
<223> similar to gi2462828 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3593
tttcgtcttc actatggcga cggtgggggc tccgcggcac ttctgccgct gcgcctgctt
                                                                       60
ctgcaccgat aacttgtacg tggcgcgcta tgggctgcac gtgcgcttcc gaggcgagca
                                                                      120
gcagetgege egggaetaeg geeegateet gegeageega ggetgtgtta gegeeaagga
                                                                      180
cttccagcag ctgttagcag agcttgagca ggaggtggag cggcggcagc ggctggggca
                                                                      240
ggagtcagca gctaggaaag ccctcatcgc gagttcctac cacccggcac ggcctgaggt
                                                                      300
ctacgactca ctgcaggatg cagctctggc ccccgagttc ctggccgtga ctgagtacag
                                                                      360
cgtgtcccca gacgcagacc tcaagggcct tctccagcgg ctggagacag tatcggagga
                                                                      420
gaagcgcatc taccgggtgc ctgttttcac agcgcccttc tgccaggccc tgctggaaga
                                                                      480
gctggagcac ttcgagcaat cggacatgcc taaggggagg cccaacacca tgaacaacta
                                                                      540
cggggtgctg ctgcacgagc tcgggctgga cgagccgctg atgacaccac tgcgggagcg
                                                                      600
cttcctgcag ccgctgatgg ccctgctgta ccctgactgt gggcgggggc cggctcgaca
                                                                      660
gccaccgggc ctttgtggtc aaatacgcac cgggccagga cctggagctg ggctgccac
                                                                      720
tatgataatg ccgageteae eetcaatgtg geettgggea aggtetteae agggggegee
                                                                      780
ctgtattttg ggggcctctt ccaggcaccc acagccctga cggagcccct ggaggtggag
                                                                      840
cacgtggtgg gccagggtgt cctccaccgt ggcggccagc tgcatggagc ccggcccttg
                                                                      900
ggcactggtg agcgttggaa ccttgtcgtc tggctccgag cctctgctgt gcgcaacagc
                                                                      960
ctctgtccca tgtgctgccg tgagcccgac ctggtggacg atgagggctt cggtgatggc
                                                                     1020
ttcacccgag aggagcccgc cacggtggat gtatgtgcgc tcacctgagc ttgcttgggc
                                                                     1080
ccagtgtggg ggtggcaggc aggtgagggc tccgttgcct tggtctgggg gcagaaataa
                                                                     1140
aatccccgca gcctactgca cttcttggct caacggtgtg ccagcttctg ggtcattcta
                                                                     1200
tggggcaaag atgetgeett agtteaggtt tgteagaage agggtetgga atggggette
                                                                     1260
agcgagggag tcagggaagc aggggagggg agggagcagc tgggcaagga agtggcttca
                                                                     1320
gaggacgtec ageeteaget ggeeceaegg agageteeag geagageeea cagtaceaea
                                                                     1380
gtgtgcccac accaccggtt actggctcct ggatgagggg gccagagagg agtgaataac
                                                                     1440
ttcccagaca cttacctcca gggcagggtg ccttccagta gccaagggaa gcctccagag
                                                                     1500
agcacagatg tgaaccetca gcagcaggca tcacceccca gtggactcgg gtgggccacc
                                                                     1560
agtageatet tetagatgge agaggggtga atggeaggge caggaaceag getgeeeggg
                                                                     1620
ttcccattct gcttttgcca cttccagctg tgtggcttta ggtgagcctt caccttttgg
                                                                     1680
tgccttcgtt tcctcattta gcccctacct cctagagctg ttttgggagt caaatgcgct
                                                                     1740
gacgtatata aagtgctttg caagatcaaa aaaaaaaaa
                                                                     1779
```

```
<210> 3594
<211> 819
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (2)...(820) <223> similar to gi5410527 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3594
attttcacat tgccaggtac cagaaacaca gaagactgac acccgccact taagtggggc
                                                                       60
cagggctggt gtctgcccat gttgccatcc tgatgggctg cttgccacaa tgagggatct
                                                                      120
tetteaatae ategettget tetttgeett tttetetget gggtttttga ttgtggeeae
                                                                      180
ctggactgac tgttggatgg tgaatgctga tgactctctq qaqqtqaqca caaaatqccq
                                                                      240
aggeetetgg tgggaatgeg teacaaatge ttttgatggg attegeacet gtgatgagta
                                                                      300
cgattccata cttgcggagc atcccttgaa gctggtggta actcgagcgt tgatgattac
                                                                      360
tgcagatatt ctagctgggt ttggatttct caccetgete cttggtettg actgcgtgaa
                                                                      420
attectecet gatgageegt acattaaagt eegeatetge tttgttgetg gageeaegtt
                                                                      480
actaatagea ggtaccccag gaatcattgg ctctgtgtgg tatgctgttg atgtgtatgt
                                                                      540
ggaacgttct actttggttt tgcacaatat atttcttggt atccaatata aatttggttg
                                                                      600
gtcctgttgg ctcggaatgg ctgggtctct gggttgcttt ttggctggag ctqttctcac
                                                                      660
ctgctgctta tatcttttta aagatgttgg acctgagaga aactatcctt attccttgga
                                                                      720
gggaaageet atteageege ggggtgtttt ceatgggeea agteatacte ageeeetege
                                                                      780
acagagacgg ccaaaatgta tgctgtagac acaagggtg
                                                                      819
```

```
<210> 3595
<211> 1843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (258)...(1366)
<223> similar to gi4586963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3595
ctggtattca tacagtgaca gagggagtgt ttttagaaat ttatagctgt ttctaggtga
                                                                       60
aaacactggt tgatttagct cccttggtaa gagcactgag cagaaagaag ttccctatca
                                                                      120
aatgggtgtg tggagcagec etgtteteec catecegtag agetecagga agttaaccag
                                                                      180
ggacttcage tgcgacctgc agatttctaa gccccctgt tatttctctg tcttttacgg
                                                                      240
geetgtgtat tteagaettg gtggtggeag teaacggggt etggateete gtggagaeat
                                                                      300
ttatgctgaa aggtgggaac ttcttctcca agcacgtgcc ctggagttac ctcgtctttc
                                                                      360
taactatcta tggggtggag ctgttcctga aggttgccgg cctgggccct gtggagtact
                                                                      420
tgtcttccgg atggaacttg tttgacttct ccgtgacagt gttcgccttc ctgggactgc
                                                                      480
tggcgctggc cctcaacatg gagcccttct atttcatcgt ggtcctgcgc cccctccage
                                                                      540
tgctgaggtt gtttaagttg aaggagcgct accgcaacgt gctggacacc atgttcgagc
                                                                      600
tgctgccccg gatggccagc ctgggcctca ccctgctcat cttttactac tccttcgcca
                                                                      660
tegtgggcat ggagttette tgegggateg tetteeccaa etgetgeaac acgagtacag
                                                                      720
tggcagatgc ctaccgctgg cgcaaccaca ccgtgggcaa caggaccgtg gtggaggaag
                                                                      780
getactatta teteaataat titgacaaca teeteaacag etitgigace etgittgage
                                                                      840
teacagitgt caacaactgg tacatcatca tggaaggegt caceteteag aceteecact
```

```
ggageegeet etactteatg acettttaca ttgtgaeeat ggtggtgatg aegateattg
                                                                      960
tegeetttat cetegaggee ttegtettee gaatgaacta cageegeaag aaccaggaet
                                                                     1020
cggaagttga tggtggcatc accettgaga aggaaatete caaagaagag ctggttgeeg
                                                                     1080
teetggaget etacegggag geaegggggg eeteetegga tgteaecagg etgetggaga
                                                                     1140
ccctctccca gatggagaga taccagcaac attccatggt gtttctggga cggcgatcaa
                                                                     1200
ggaccaagag cgacctgagc ctgaagatgt accaggagga gatccaggag tggtatgagg
                                                                     1260
agcatgccag ggagcaagag cagcagcgac aactcagcag cagtgcagcc cccgccgccc
                                                                     1320
ageageeece aggeageege cagegeteee agaeegttae etageeeage geeegaaage
                                                                     1380
cgtctcttct atgcaataac acaatagtat tactctactg cgatgtacgg aactgcggtg
                                                                     1440
tgtgtacaca tactcacgta tatgcacata tttatataca ggaagaaaaa agacagacaa
                                                                     1500
gatggggctt ggtttataac caccttgccc tgtcttcctt aactccagaa gccagtttgg
                                                                     1560
tgaggggtgg gggtgcggcc accaggtctg agctcttcct actgtggaag gctccagaag
                                                                     1620
gcccttcaca aggagacccc tcacctggat ccagtcgact gcggggcttg cccctcatgt
                                                                     1680
gggctggcct ccatcggcca cgtccaaagc tgtcactgct actgcttcag gctcacatcc
                                                                     1740
ccccgacctg atggcgtgcc cgcccctct ccctgcgggc catgccacag gtttctgtgt
                                                                     1800
tttgctttag ggacagaacc acttaggaag gaaagaactc ccg
                                                                     1843
```

```
<210> 3596
<211> 4917
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(4917)
<223> similar to gill36426 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3596 aggactacat cgagaagcac tgcccgagcg ccgtggtgcc ggtggagctg cagaagctgg 60 eceggggeag cetggtggge ggegggegge ageggeeeee geagaeeeeg etgegeetge 120 tggtggacgc cgacaactgc ctgcaccgcc tctacggcgg cttctacacc gactgggtca 180 gcggcggcca gtggaaccac atgcttggct acctggcggc gctggccaag gcctgcttcg 240 geggeaacat egagetette gtettettea aeggegeget egagaaggee eggetgeaeg 300 agtgggtcaa gcggcagggc aacgagcgcc agacggcaca gcagatcgtc agccatgtcc 360 agaacaaggg caccccgccg ccaaaggtct ggttcctgcc gcccgtctgc atggcccact 420 geateegeet ggegeteate egetteeaeg teaaggttge acagageatt gaggateace 480 atcaggaagt gattggtttc tgcagagaga atggtttcca tggcttggtt gcgtatgact 540 ctgattatgc actgtgcaac atcccctact atttcagtgc ccatgcccta aaactgagcc 600 ggaacgggaa aagttctcac cacaagccaa tatctgatgc atgaagttgc caagcaactg 660 gacctgaatc caaatcgttc tcctattttt gctgctctct taggaaatca cattctgcct 720 gatgaagate tggetteett teactggagt ttacttggte cagaacatee actageetca. 780 ctaaaggtcc gggcccacca gctggtcttg ccaccttgcg acgtagtgat caaagccgtt 840 getgaetatg taegeaaeat teaggaeaee tetgaettgg atgeeatage taaagatgtt 900 ttccagcatt cacagtctag aacagatgac aaagttattc gatttaagag agcaattgga 960 tattattcag cgactagtaa gcctatgtca tttcatccac cacattactt agcagccaga 1020 eceggicegi tiggaatgee igggatggig eegeegeatg tiecteetea gaigeteaae 1080 atteegeaga cetetetgea ageaaageee gtggeeeeac aggtgeeeag eecaggggge 1140 geceegggee agggteeata eeegtacage etetetgage cageacetet caetttggae 1200 acgagcggga agaatctgac ggagcagaac agctacagca acattcctca cgaagggaag 1260

```
cacacgeege tgtatgageg gteetegeee ateaaceegg eecagagegg cageeceaac
                                                                      1320
 cacgtggatt ccgcctactt ccctggctct tctacatcgt catcttccga caacgacgag
                                                                      1380
 ggcagcggag gggcgacaaa ccatatcagc gggaacaaga ttggctggga gaagacggga
                                                                      1440
 agccactcag agcctcaggc acgaggagac ccaggagacc aaacaaaggc agaaggctcg
                                                                      1500
 tccactgcct cttcaggaag ccaactagcc gaaggcaagg gaagccagat gggcactgtc
                                                                      1560
 cagecaatee egtgeeteet gtegatgeee accaggaace acatggaeat caccacacet
                                                                      1620
 cccctgcccc ccgtcgcacc tgaggtgctg agagtggccg agcacaggca caagaagggg
                                                                      1680
ctgatgtacc cctacatctt ccatgtcctg acgaagggtg aaatcaaaat tgctgtttct
                                                                      1740
attgaagatg aagccaacaa ggacctgcct ccggccgctc tgctctatag gccagttcgt
                                                                      1800
cagtatgttt acggagtcct gtttagtttg gcagaaagca gaaagaaaac tgagagactt
                                                                      1860
gcttttagaa agaacagact tccaccagaa ttttcaccag tgatcattaa agaatgggca
                                                                      1920
gcttacaaag gaaagtctcc tcaaaccccg gaactggttg aagctcttgc cttcagggag
                                                                      1980
tggacctgcc ccaacctgaa gaggctgtgg ttgggtaagg cggtagagga caagaaccgc
                                                                      2040
aggatgaggg cetteetgge etgeatgagg teggacaeee cagecatget caaceetgee
                                                                      2100
aacgtgccca ctcacctcat ggtgctctgc tgcgtcttac ggtacatggt gcagtggccg
                                                                      2160
ggagcacgca teetteggeg teaggageta gatgcettee tggeteagge getgteece
                                                                      2220
aaactctacg agcctgatca gctccaggag ctcaagattg agaacctaga tccccgagga
                                                                      2280
attcagctat cagctctctt catgagtgga gtagacatgg ccttgtttgc aaatgatgca
                                                                      2340
tgcggacagc caateceetg ggaacaetgt tgteettgga tgtattttga tgggaagete
                                                                      2400
ttccaatcca aactcctcaa agccagccgg gaaaagaccc cactcattga cctctgtgat
                                                                     2460
ggtcaggctg atcaggctgc caaggtagag aagatgcgcc agagcgtcct cgaggggctc
                                                                      2520
agetteteca ggeagageea caegeteeet tteeegeege caectgeeet geeettetae
                                                                      2580
cctgcctctg cgtacccccg gcactttggg cctgtcccac cctctcaggg caggggcaga
                                                                      2640
ggctttgcag gcgtctgtgg ctttggaggc ccctatgggg aaacggtagc aacaggccct
                                                                      2700
taccgtgcct tecgtgtggc ggcagcatcg ggacactgcg gagccttctc aggcagtgac
                                                                      2760
agcagcagga ctagcaagtc ccagggcgga gtccaaccta taccttctca gggaggcaaa
                                                                      2820
ctaaaaatag ctggcactgt ggttggccat tgggctggga gcaggcgggg ccgtggggc
                                                                     2880
cgggggcctt tccccctgca ggtggtttct gtcggaggac cagctagagg gcgtccaaga
                                                                     2940
ggagttattt ccaccccagt gattagaaca tttggaagag gtggaaggta ctatggcaga
                                                                     3000
ggttacaaaa accaggcagc aattcagggc agacctcctt atgctgcttc agcagaagaa
                                                                     3060
gtggccaaag aacttaagtc aaaatctggg gaatcgaagt cctctgctat gtcttcagac
                                                                     3120
gggtccctgg ctgaaaacgg agtgatggcc gaggagaagc cggctcccca gatgaacggg
                                                                     3180
agcacgggtg acgccagggc ccccagccac tctgaaagtg ccttgaataa tgactctaaa
                                                                     3240
acgtgcaata caaatcctca tttaaatgca ctaagtacag acagcgcttg ccgcagagaa
                                                                     3300
gctgctctgg aggcagctgt cttaaataaa gaagagtaaa cttattttt atagagggtg
                                                                     3360
aaggatgctg gaagggtaag gatttaggaa tatctggaga gaaagagagc ctgcagttat
                                                                     3420
gtacattttg teettteegt aagagaaaaa tgaggaettt ggaaatteag ateeetettt
                                                                     3480
gatatcagag atttaaacaa cacattttta gttttaacca gttgtagtca aaatgctaca
                                                                     3540
ataaaacaaa aaagagaaag aaaatgaaga gcatttgact cccgcactta aaatgaagta
                                                                     3600/
cacataaagt ttaaactggt tatgacaaaa gcctatagtt gtgtttcttg aactataaag
                                                                     3660
aaaacaaatt ttggcagtct ttaagtatat atagcttaaa atataatttt tagcatttgg
                                                                     3720
caccatatgt atgccattat atttgatttt gcattactgt ttcacaatga agctttcttt
                                                                     3780
aaggetttga tttttatgat tatgaaagaa ataaggeaca accaeagttt ttetttetta
                                                                     3840
aatttcatca ctgttgatgt ggttcttttg tgttaaaaaa aaaaagtgca actatcaaaa
                                                                     3900
ctaaaaaatt atagagtaat attgccgttc tgctgatttt aaatatacaa tacatcatac
                                                                     3960
atactttaca agcaagttaa atggagataa agttgaaatc atagaagatg caaatgacct
                                                                     4020
ttcaaaatca acacaatgtg ttctgaaact ttcgtgacta ataccatgca tctgtgatca
                                                                     4080
atgaactatg tggttttgaa tcggatgtag accattagta ctactacttg agctaaactt
                                                                     4140
ctgcatggtt cataattttt aaagtgtgta gttaatatgc atgttatcgt cctttcttcc
                                                                     4200
attettaaca gtatgtgccc atttgcaaaa caaaaatgct aataatcagt aatagteeta
                                                                     4260
taaaagatgt taactctgtt tagtcattga ctgatcttgc tctaacctta aaattttgtg
                                                                     4320
attattgacc tetgttgeat ttattetaaa geeceecaaa aattatetag eegtttegaa
                                                                     4380
tateaacatt accetggtgt atteactget gtatgeatta ttgttetttg ttgctgtttt
                                                                     4440
atgccttcat attagcaaat atgaaattct gtgaaaaaaa accctttgat cttaaaaaaa
                                                                     4500
aaaaaccacc cccccttct gtagcaggaa acaaattgct tgttcttgag aactttccca
                                                                     4560
tcaagaattt agtagaagca ggtatacttc tatcattttg atgtttttgt taatgtttcc
                                                                     4620
aaacaatgta ctttgaaatc agaatcactt cttatcgttt tcatatactt ctgatgctct
                                                                     4680
```

```
tcatcacatt agtgatcaga aatgaggtgt aattccccaa ccctgcccg caagagctaa 4740 gtaggatctt actgtaagtt gaagggagtt ttgccctaac tcatggattg tgcaagaatg 4800 aactgctgtt gggtttgatt gactgtcgat ggattgtggt gtggtgtatc tgaaggctat 4860 tgaatgcaac ttacaatgct taataaaaat ctttattctt ttagtataaa aaaaaaa 4917
```

```
<210> 3597
<211> 2401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1608)
<223> similar to gi4102707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3597 cagetteeeg gteaggtaee tgggteaegt ggaggtagag gagteeeggg gaatgeaegt 60 gtgtgaagat gcggtgaaga agctgaaggc gatgggccga aagtccgtga agtctgtcct 120 gtgggtgtca gccgatgggc tccgagtggt ggacgacaaa accaaggatc ttctggtcga 180 ccagaccatc gaaaaggtct ccttttgtgc tcctgaccgc aacctggaca aggctttctc 240 ctatatctgc cgtgacggga ctacccgccg ctggatctgc cactgttttc tggcactgaa 300 ggactccggc gagaggctga gccacgctgt gggctgtgct tttgccgcct gcctggagcg 360 aaaacagcga cgggagaagg aatgtggggt cacggccgcc ttcgatgcca gccgcaccag 420 cttcgcccgc gagggctcct tccgcctgtc tgggggtggg cggcctgctg agcgagaggc 480 cccggacaag aagaaagcag aggcagcagc tgccccact gtggcttcct ggccctgccc 540 agectgggea egtgteeceg acaccageca ecacateece tgtgtgagaa gggtgaggea 600 ggcacccctg tggctgcagg caccactgcg gccgccatcc cccggcgcca tgcacccctg 660 gagcagetgg ttegecaggg etectteegt gggtteecag cacteageca gaagaacteg 720 cettteaaac ggcagetgag cetaeggetg aatgagetge catecaeget geagegeege 780 actgacttcc aggtgaaggg cacagtgcct gagatggagc ctcctggtgc cggcgacagt 840 gacagcatca acgetetgtg cacacagate agtteatett ttgcccagtg etggagegee 900 agcacccagg gccaccacct gccacaacag ggacttctgc ctggggtgag ccctcccgtg 960 ccccctgcag ctgccttcca gcctgggcac aagcggacac cttcagaggc tgagcgatgg 1020 ctggaggagg tgtcacaggt ggccaaggcc cagcagcagc agcagcagca gcagcagcaa 1080 1140 accatgeete etgeeetgea geettteece geeceegtgg ggeeetttga egetgeacet 1200 geecaagtgg cegtgtteet gecaececca cacatgeage ceeettttgt gecegeetae 1260 ccgggcttgg gctacccacc gatgccccgg gtgcccgtgg gtgggcatca caccctcaca 1320 gatggtggca aacgeettet geteageege ceageteeag ceteageetg ceactetget 1380 tgggaaaget ggggeettee egeeeetge catacceagt geeeetggga geeaggeeeg 1440 ccctcgcccc aatggggccc cctggccccc tgagccagcg cctgccccag ctccagagtt 1500 ggaccccttt gaggcccagt gggcggcatt agaaggcaaa gccactgtag agaaaccctc 1560 caaccccttt tctggcgacc tgcaaaagac attcgagatt gaactgtagc ccgagccgcc 1620 ccacccactc catcatctcc aggtgcccca cgcctggggg tggaggcaca acctctcccc 1680 taaccetget ecetgggget gegeeectea acaceetete aacaceedec teecteaace 1740 accocgacaa ccactacaga accaacattg tgacgcccag gttgcaacag gatggaattc 1800 agggacggac ccagcctggc taagggaacc atttcactgc cggacttagg ctggcaatgc 1860 ccccttcccc aaccccagac acaggggttg gccacaatcc cactgaatgc ccttggttca 1920 cactccattt cccagtttct gttgaccccc accttccagt gttggacagg atggagggg 1980

```
gacacttgct taggggctct cetgggccc acaccagtgc ccacccaaa tetggtcgtc 2040 tectceccc atgcacagca caagetaagg getgeetet gecacaege tgegtteact 2100 gecaatgetg tactcacete catcacete caactttggg geceatgtet teettgggec 2160 aaggteteat gggggetagg gecaagttgg gggeccagga ggggggggg gaggaggagg 2220 agaagatgeg cagttacete atgteggtge cegetggga ggggteeggg aagaagggga 2280 aggggtgeet ggegggtaet teetatett teatteeag attettettg tatetaaact 2340 tgaagatttg tattatacaa ggacagecaa taaaggaaga atataatggt gaaaaaaaaa 2400 a
```

```
<210> 3598
<211> 1033
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1033)...(331)
<223> similar to gi3746840 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3598
ttttttttt ttagtgcaag aaatgctgca tcattgaagc acttgagaat taccatgaaa
                                                                       60
tctaacaaaa aatgtcatca actcaggagt aataataaaa aagagaaaca accagagagg
                                                                      120
cacacagatt gttgtttttt taaaaggatt tttatactat attaaaaaac cacaaaataa
                                                                      180
aaaagggatc aatcaacata tatcttagaa gtccttccaa gagtcttggt atgcaacagc ,
                                                                     240
catggagget gtgacetttt teettetttt eteageetge agtteattta aggateaeeg
                                                                      300
gagatgacte gtgetetagt tettaaaate aaacttgtte tgecaaatee aagaceetga
                                                                      360
attigiccaa attigiagaaa catgottita ccaccogtoo accaaaatac ctcccattca
                                                                     420
agtcaacaac cgctttaatt gctgattcaa ctctctcaaa ttctaaaaat atccgtactg
                                                                     480
cttcatcatc aggggcacca ggaatttcaa atatcacaca ttttccaact ttgccatatt
                                                                      540
tttcacattc ttccttggtt tcaacttcca agtcttcatc cacctctccc gcaccaacca
                                                                     600
tgttccttag taagaccact ttagtaggac acttaagtat ttcagtcagc ggatttgaat
                                                                     660
ctgacttett ggatgeatet ttetetgtgg cgtcgcccac gatgatettg ccgccacget
                                                                      720
tgctggtctt ctccactgac aaggcagtgc tcaggccctg ctcatgcttc cccagaccct
                                                                      780
ggccctcccg gaagccgtac ttctgcatga tcttgtgcgc caccgtgccc cccaagttag
                                                                     840
cgaggaagga gttgcgctgg gccgggttgg agatctcggt ctgtcttgtt cctcgtacac
                                                                      900
tgggggagga atggcagttt tggaagactg tgatcgaggt cttgagtcct cttcataagg
                                                                     960
aaaatctcgg ggtaactgtc ttttactgcc agagaagtgg gtgaggcaat ggcagctccg
                                                                    1020
cccatacttg ttt
                                                                    1033
```

```
<210> 3599
<211> 1471
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (1)...(1472)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1436)...(738)
<223> similar to gi3165570 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3599
cetttttttt ttttttaggt tttageagea ettttaette cacatecaaa etecetgggt
                                                                       60
cctcacaaca gccctgtgag gtaggtaggg taggaaggtt tcagagatcc ccatttatag
                                                                      120
atgaggatgc tgaggcacag agaggtgaag tgacttgtcc aaggtcatac aaccagcagt
                                                                      180
gtagaggget caaagecage attectecae ttgaactect gegeteegge cetetggeag
                                                                      240
ttcccacatc ctctctattc tctctgtgtc ccccacctc tcaactctcc tgggtctgca
                                                                      300
gggaccctaa aggcagcctg gcagctgaga tttttcagga atggcaactg gggtaggcct
                                                                      360
ggtcaactcc agataggaac tgaccctgaa gagcatgagg ccagctttgc ttctccccat
                                                                      420
ttcccagttg gatggaaggc ctagtaggtc ccagggcaag gatggagcta ggcatgattc
                                                                     480
atgaacgaat ggtgataaag gtaggtgtaa gcatatgtgt gtcctgcact aaagacaaag
                                                                      540
geteccetaa eccaaggee caaggeagtg tttcaagtge teacececat geetetetea
                                                                     600
tcccacagag ccacagtgag tgtcctcagc agcaaaagga gccatagaaa tagctgcctc
                                                                     660
tggcaatgag ctgctccagt ggacagctcc caccaagcct tcagacccca tcacgcagac
                                                                     720
acagtgeete caeggettga etggggeeet gggeeacaee eecaataaca aacageeggg
                                                                     780
geccageetg cagaetagag caggageage gggeagtggg catggeagge aatgeeteee
                                                                     840
agegeegeeg tgeaaggeta aageteteea cagageecaa aggacatgge tggtttecaa
                                                                     900
ggcccccaat ggccacaatg tggcccccaa gggacccaac cacaaagtct gccctcttat
                                                                     960
ccctcatgcg caggetgcgg ggcaatttgg tccaggaccc atgctccaqq tcaaacatct
                                                                    1020
ccacagtgtt gacaaagtgt gggcgagagt agaagttgtg gggcccaggc tgctgcaggc
                                                                    1080
cacccagget aaagacgetg cetteageea tggegeagee ageaaaggee egaeggetgg
                                                                    1140
gtaggettgg atgeegggte catgtaeggg cetecagate aaaggettea aaageagtea
                                                                    1200
ccgggagctt gccctggcgg ccccccagga catagatctt gttcccgtgc aggaaggtgg
                                                                    1260
aggccccata gcagggtgtg ggcatggagg gtagcgaaag ccagcagtcc cgacggggct
                                                                    1320
catacacacg tacctgggcc tggggggccg tgtcagggcc cattccccc agagcataca
                                                                    1380
ccataccatc cgccggtgct acgatgctgc cagggtacgg ggtccgccgt tccgctggca
                                                                    1440
cgaggcctcg aactgagtan nnnnttccat g
                                                                    1471
```

```
<210> 3600
<211> 949
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(318)
<223> similar to gi2645205 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3600 agccccatca gtaagaagcg gaaacgaaag ggatcttgcc agagacgaag aagcgcaaga 60 aacgcaagtc agaggatgcc acgccagcgg aggatggcac acctgcagcc accgcgggag 120 ccagecece ageatgggea ggaagaagag gaacaggaca aaggetaagg teecageeca 180 ggcaaacggg acgccaacca ccaagagtcc agcccctggc gcccccacc ggagccccag 240 cacccctgcc aaatccccaa aactgcagaa gaaaaaccag aagccacccc cggttctggg 300 ctgggaccct ggctccaggg ccatgtccag ggctctggtg tttgcctggg ttggtgcagg 360 ttgatgtgct ggctgcaggc aggtgtgacc atctctcgtg cctgccacct ctttgccccc 420 aggetttttt getgtgaggg agecaceagg gggtgattta aataggttta tttetteatt 480 tacaagagga atatattigg cttctctctt aagactctga gattcacaat cagcagctct 540 aaaaaataaa ggagcagttt ggcttccgga aggaagagga ggcaacactc ggacctggtt 600 cttgtacaac aagaaaacat cgctggggcc ccgctgaggc tggagtgggg gtggaggctg 660 gtctttggag gatgccaccc ccaccccatc ctcttgtcag gccctcgggg taccccagag 720 cttggtgggt gagtattcca cctgcttaca caccactgaa ggccacagcc aggccagtta 780 cttagggggg caagaagag cattgtccaa gctggctctt ggggggggtc ccccattggc 840 cacaaaggcc tcaccccca ccccatcccc gtaaccagaa accaccttga ttgcagcaga 900 aattcaggca gatgggtagc gcaggggggc taaccccccc acaagcggg 949

```
<210> 3601
<211> 1459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(987)
<223> similar to gi808915 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3601
ctggcgggcg tgggaaccca ggccccgccg aggcggccag gaggtgagat ggcagctggg
                                                                       60
caaaatgggc acgaagagtg ggtgggcagc gcatacctgt ttgtggagtc ctcgctggac
                                                                      120
aaggtggtcc tgtcggatgc ctacgcgcac ccccagcaga aggtggcagt gtacagggct
                                                                      180
ctgcaggctg ccttggcaga gagcgggggg agcccggacg tgctgcagat gctgaagatc
                                                                      240
caccgcagcg acccgcagct gatcgtgcag ctgcgattct gcgggcggca gccctgtggc
                                                                      300
cgcttcctcc gcgcctaccg cgagggggcg ctgcgcgccg cgctgcagag gagcctggcg
                                                                      360
geegegeteg eccageacte ggtgeegetg caactggtat etgegegeeg gegeegageg
                                                                      420
gctggaggct ttgctggcgg acgaggagcg ctgtttgagt tgcatcctag cccagcagcc
                                                                      480
cgaccggctc cgggatgaag aactggctga gctggaggat gcgctgcgaa atctgaagtg
                                                                      540
cggctcgggg gcccggggtg gcgacgggga ggtcgcttcg gcccccttgc agccccggt
                                                                      600
gccctctctg tcggaggtga agccgccgcc gccgccgcca cctgcccaga cttttctgtt
                                                                      660
ccagggtcag cctgtagtga atcggccgct gagcctgaag gaccaacaga cgttcgcgcg
                                                                      720
ctctgtgggt ctcaaatggc gcaaggtggg gcgctcactg cagcgaggct gccgggcgct
                                                                      780
gcgggacccg gcgctggact cgctggccta cgagtacgag cgcgagggac tgtacgagca
                                                                      840
ggccttccag ctgctgcgc gcttcgtgca ggccgagggc cgccgcgcca cgctgcagcg
                                                                      900
cctggtggag gcactcgagg agaacgagct caccagcctg gcagaggact tgctgggcct
                                                                      960
gaccgatccc aatggcggcc tggcctagac caggggtgca gccagctttt ggagaacctg
                                                                     1020
gatggcctta gggttccttc tgcggctatt gctgaacccc tgtccatcca cgggaccctg
                                                                     1080
aaactccact tggcctatct gctggacctg ctggggcaga gttgattgcc ttccccagga
                                                                     1140
```

```
gccagaccac tgggggtgca tcattgggga ttctgcctca ggtactttga tagagtgtgg 1200
ggtggggggg acctgctttg gagatcagcc tcaccttctc ccatcccaga agcggggctt 1260
acagccagcc cttacagttt cactcatgaa gcaccttgat ctttggtgtc ctggacttca 1320
tcctgggtgc tgcagatact gcagtgaagt aaaacaggaa tcaatcttgc ctgccccag 1380
ctcacactca gcgtgggacc ccgaatgtta agcaatgata ataaagtata acacggattt tgatgtgaga aaaaaaaaa 1459
```

```
<210> 3602
<211> 2416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2417)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2383)...(2122)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3602 ttttttttt tttttttca caagttatat tttattttaa cacgaggatt aacatatagt 60 tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga 120 gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc 180 ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag 240 gttaaaatag aattetggae etttttaaaa agtttttgga tgatataage acaggaggea 300 gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt 360 tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct 420 ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc 480 cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg 540 aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc 600 aggttetttt aaaattagte atettacaac acaacagtat tetagcacgg tggcgaagtg 660 acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta 720 tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga 780 tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc 840 atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc 900 tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac 960 ggggggatac aagcatatee tataetgggg gtgaeggtea tteaaagage aaattaetge 1020 agettatate ttiticeacta tgitgeaaga aatgaateta teetgaceea taatatgaaa 1080 gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat 1140 cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tgaagatccc 1200 tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat 1260 gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tgtgtcatcc 1320 gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt 1380 aggicacccg tigcagggac cggaagicca tggcictgcc gcaaccctga gcggtitgca 1440 gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa 1500 gecaetteet etteacetge etgggeetea gegtetetge gettgtggtt tetegteece 1560

```
gagggetgae tgagetgete eggaagggtg gtgtgtggte aacettggtt ggetgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                     1680
tecetgteee titggettet ataggaette ettgtettag atteataaac ageaagagga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                     1800
gacatcatcc ccaggettee gtggegetet eggteacagg agetttagge caatggttee
                                                                     1860
tettgaetgt ttttgeecea aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
ggggggggt ggtggccaca gattagggga ceteaggttt teeteaaaaa eecacaeagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgetaac eteggegggg tgeggtaget cacacetgta ateteageae
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
ggttgtagtg agecgagate atgecaetge actecagtet gaacaataga gegagaetee
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<210> 3603
<211> 1190
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (493)
<223> similar to gi4056479 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3603
 geggéegeég tggeegaget geeggtgetg gaegeegeg ggeagegggt accegttegg
                                                                        60
 cgcgctgttc cgggagcgcc gcgccgtggt ggtgttcgtg cggcatttcc tgtgttacat
                                                                       120
 ctgcaaggaa tacgtagagg atctggccaa aatccccagg agtttcttac aagaagcaaa
                                                                       180
 tgtcaccctt atagtgattg gacagtcatc ctaccatcat attgagcctt tttgcaagct
                                                                       240
 gactggatat teteatgaaa tetatgtega teetgagaga gaaatttata aaagattggg
                                                                       300
 aatgaaaaga ggtgaagaaa ttgcttcctc aggacagagc ccccacataa aatcaaatct
                                                                       360
 actotoagga agoottoaga gootgtggog ggoagtgact ggoodtotot ttgattttoa
                                                                       420
 aggagaccca geteageaag gtggaaccet cattttaggt ccaggtaaca acatecattt
                                                                       480
 tatacaccgc gataggaata ggttggatca caaacctatc aactctgttt tacagcttgt
                                                                       540
aggagttcag catgtgaact ttacaaacag accttcagtt atccatgtgt gacttaaaat
                                                                       600
gcactcagtc actttcaact ggaccttctg gaatgtgacc ttcaatgcct gggtgtaata
                                                                       660
tectegtgea gtgtetaace tgetgteeet teccageett tgaggagtta gggaageata
                                                                       720
 aagggggett gaacetgttg aattgeatge tgggaageat cagttgteaa aatatgttat
                                                                       780
atacttccat tttataactt ttaacatttt atacaaaaaa aatgaatata caaaatataa
                                                                       840
ctttaaaagc tataaaatca taaatactct aaattatttt acattatggt atattcagtc
                                                                       900
aatgaaagag ttttttggca atataaattc tgacagtata taaggggaca ggagaacaac
                                                                      960
acaagaccat tatattcagt gaagaaggca aaatatcaaa tctgtcaaca atgtaactgc
                                                                      1020
atttttatat gtatattt gtatttttgt atgctttgga aaaagacagg aaataaacac
                                                                     1080
caaaatgttg ccagtaggta tctctgtgtt aagattagcg ctattatttt cttttctgta
                                                                     1140
cttttctgta tttcccaact gttatataat gagcatgatt aatattgtag
                                                                     1190
```

```
<210> 3604
<211> 449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (21)...(160)
<223> similar to gi1408211 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3604
aaaacttttg ttttttttt ttgaaagctg cacagcctga aattaccttt attcaattaa
                                                                       60
tgcaaaaaca aaaggggaga tgttggaggc cgaaggaatg agggtcgtga ccaactcagt
                                                                      120
ataccactgg aggetetgtg ageaaacage aaactgttet catgaaagea ggatgttgge
                                                                      180
gaactgacaa actotytoty cogcoagaag gaatgotygg ggcagtcaty toccaggtoc
                                                                      240
cgtgctcctt gaggttatcc acaggaacat ccagaacctc cataaaggca ggccatgctt
                                                                      300
atcatcattg cagtatccaa tetgeagtgg tgetggetge etgttgtggg tgeteagtat
                                                                      360
ttatctccaa gtcccgcctt tcgcgcatcg cctgctgctc tcccactcag cgccacctca
                                                                      420
gtcccacaaa ggccgggctg ggatcctgc
                                                                      449
```

```
<210> 3605
<211> 4197
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4198)...(1045)
<223> similar to gi31438 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3605
ttttttttt ttctggtcag tgggggcact gggtcagatt tattgcactt gcaacagagt
                                                                       60
ttaaataagt cctgggtgtc tggtgccaag gtgagggaag ggttgggcag agagatgagg
                                                                      120
ggcagcatca gtgcagctgg caggcagaac ccaaattctg caggcccagg acagtgggct
                                                                      180
cccctttctc tggggaacag ggagggcctg tgtctggcca ggctgaggtt ccagatctgt
                                                                      240
tgccatcatg gccccttcag ggtcctggga aattcctggc ttctcctaaa tcagggtgaa
                                                                      300
ctgggcctcc aggatcaggt ctggagcagg cccaaatata gtcctggatc tgcctggatt
                                                                      360
aggtgccaat gtctgagtct gggttccaga tcaactccag accccaggct ggaatctggc
                                                                      420
cccatttgag ttctgattcc ccttggagct gggctctggg gcggccctgg qccaqcatct
                                                                      480
atccttgtgt ggcatctgtc ctgagctggt cctggggcac catgcatagt tagtgttctt
                                                                      540
tgttggccca ccagggtggg gctgtccaga gctgccaggt cttaactccc caagttccag
                                                                      600
gttcttagct gggggcttct tttggatctc tggcaaggct gaggacagat ctttgcaggt
                                                                      660
```

```
tggagetgga caggaagtee ttgtggeatg tetggeeeaa agaaetgtga atqqatttee
                                                                       720
 tagttatett tecaagttgt tteaggaaae tetecaaaat geaaaggett eagggagget
                                                                       780
ggggcctctg tccctggatc tgagttcccc catccatgaa gagggtatgt gtaaacaagg
                                                                       840
gtccttcaca gtgcatgggg gggagggatc cccagctcct caccccctg gctctggccc
                                                                      900
ttcaagtatg tctctgggct ggggagagga gcttctccct ggccgtcagc accttcaaga
                                                                      960
agtacccaga cccctccttt tcagtagaat gagggtgggg ggactggttc ttcaggaatg
                                                                      1020
ggagtctgaa attgggagga ctcaggcatc agaggtggct ggaggcttga gctgagcttt
                                                                      1080
ttccatggcg gtgccatatg ggagggagcg tttgaagaat ccaagcttgt agaggatgta
                                                                     1140
gatgagtaga cetaggagea ggaggeeaaa caggatgget caggatgatg atccccagtg
                                                                     1200
ggacgccata getgeettet egeettggte ceattgeaca getgtggeee accetgacge
                                                                     1260
tetttttggg ggeagetgee gaggeaggat teggtaggge atetteaggg etttgtacae
                                                                     1320
agceteacae tgeaggetaa atggetggtg etceegetge aagaaagtet tggeecagae
                                                                     1380
teggaaatge aactgeagae tttggetete ttgttggtge aggggeeega geteacageg
                                                                     1440
cagcctgaaa cactcagcct cogggcattt caggatctga ggtcccgagg aagcagagct
                                                                     1500
gcggcttgga gcttcccgtt tttgctggtg gtgcagggaa ccctcgggat ccaactccag
                                                                     1560
gccctttggg ttaatggggt gattggtggt gcagttgagt cccgtaactc tggtcacata
                                                                     1620
taggagetge tgacetteca gageetgggg acagetgagt tecageacae cetggetaat
                                                                     1680
ggagetgggg cettggttga tgageteata gaeatggtgg acageaggte ceaggteete
                                                                     1740
ctccttctga ggctggtctc ggggatgcca gtcgcttact gggaatagca ctgcctcagg
                                                                     1800
cttggagaca ccgttcaggg tgacctgggc ctgagcctcc acggagagcc gaaaggaaac
                                                                     1860
cacgtcgctt tgcgagttgt tgagattctt gctgaggatc tggaagtcaa actggatggt
                                                                     1920'
tttcttagtg tcccggagat gagggactgt aaaccgaagg ccaccccaca gactggctcc
                                                                     1980
tgccttcatg gggttgccca ggtcacacac cagcaggcgg ctctggttca cggcaaagta
                                                                     2040
gtcacagete aggetggaga agtteeetgg gtgtetgaeg agteetgagt acteageete
                                                                     2100
tggaggggcg gtgacccgaa gctcagcctc ataggcgcca ccctcaccca cattctgggc
                                                                     2160
atggaaagtg aggttcaggg cattettgtc acccaggtac acatggttct gctcccaaa
                                                                     2220
cacttccage tgcaggtcag gcacacagat gttgtcttct ccacagtcca gcaagatctg
                                                                     2280
agcettgtee tetateegge tettgetetg ataatgtagg getggeetga ggeegtgget
                                                                     2340
gtccactggg gcttgggggt ccaaggagaa gttgagagcg atgtgaatcg gcgagagttt
                                                                     2400
gtctcgaaat tctgactcgt tcctgaggta gatcttcatc tctctgcaat cctctcgagc
                                                                     2460
cccattctgg atgagcaggg tctgggtcag ggttgcctgc ctggaggcca ggaacagtgc
                                                                     2520
ccgccgtacc cctcccttct gcttctgcca gtccagctga agttccactg tgaaaccaat
                                                                     2580
ggagtcagca acgtgttttc cagaagcatt gaggcagaag ctaaggttga tgcaggccac
                                                                     2640
agggttcccc tctaagctgc agctccgctc ctctgggttg aacatggcgg ggaagatggt
                                                                     2700
gagggaggca ctagcggaca cgatggggcg gccctgtat accacagcct tgtccacacc
                                                                     2760
aaaggacccc acaatcagat caggatatcc attgccatcc aggtctcggc ctcctcgaag
                                                                     2820
ggcagagcca aagaagtctg gggtgtggct ggctgcccac aggggctgca gaacctggga
                                                                     2880
aggettagag eccagecete etgggeecee aggaaataea aacaetaete eetgetgggt
                                                                     2940
ctccccacca aagggagccc cgatggccac atcattgtag ccatcctggt ccaggtcccc
                                                                     3000
caggggggtc aaggagctgc caaatcggcc aaactcatca tggccagtga gggtaagggt
                                                                     3060
gggcgtgggc tetatgcegg ctgggtgctg caggtagacg tagaccetgc ccacctectg
                                                                     3120
aggccgcccg tcaggggtcc gatccatgag caggggtgcc cccaccagca agtcatccag
                                                                     3180
cccgtcccca ttgacgtctg tggcggccac tgcatagcca aagtaggagg ccatctgttc
                                                                     3240
ccctgagaag ttgtagaggg atcgaatgtc tgagccatta aggatggtga catagccgta
                                                                     3300
agtgaggttc cetttgggca caccagcaac aaagtettet gtgtcatcac cactgaatte
                                                                     3360
accaacagee acagagtate ctaggtaget gteateatag atggaactgg cetggegagt
                                                                     3420
ctgcagctgc ccctgaacca ggttgatcag gtactcgggg taataagatt ctgcaatctg
                                                                     3480
ctcctgagtg gcagacagga tctggccttg ccagaaatag cttcctggtc cacctaaaac
                                                                     3540
cacacggcca gtcttggtga actcggcact gaagcctcct tggcagtaac cctgtcctgc
                                                                     3600
tgcccagctg aaatctgagc ggcagggtgc atactccaga attcgggtga agttatctgt
                                                                     3660
ggagaggtag caggtgccca cggggtcgct cagtggctcc ttctctgtgc gccagctgta
                                                                     3720
cagtggagcg catgccaaga tggaggagcc atgggctcga actgttgccc cgaaccactg
                                                                     3780
caaggacttg tactccacag getectetee etetgagetg gacagtgagg actccaggag
                                                                     3840
ccgagagcct ttgctgtcaa attcaatggg ggtgcactgt gtggggctgg caccccaagg
                                                                     3900
acagaggtag acagcaccac cctgcagcac tcctggctgg ctggtattag ccttgggtgc
                                                                     3960
teccaccage acactgacce egtetgttee eggeeggtaa aactecactg agaatecgaa
                                                                     4020
gaaggagccc gggggccccg agagtactgc tggggcctcc gcgtctaagt tgaagccccc
                                                                     4080
```

```
<210> 3606
<211> 2353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2354)...(697)
<223> similar to gi602288 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3606
ttttttttt ttgggagaag tgggggcctt tattaaggtc tggcagatgt ggtggaggtg
                                                                       60
gaagtacaaa cccaggcctg ggcctaggaa agggcagaag aaaggcaaag ggtcccttgg
                                                                      120
agraggaacc catecetete tgettatace cageacceet cateceaggt teettette
                                                                      180
aacctccgcc tgcctctggg aacacagagc accaagaact gacaaaccgg gaccctccag
                                                                      240
ggccacagcg tggggcagag tccaggcttc tgtctccccg cagtgggaga tctggggagc
                                                                      300
tcagtgaacc tcctcaccct cccttgccag tatgaaagtt tgggaagcgc cttttcttgt
                                                                      360
cccccagaac agaacaaact ctttgttctc tgtggtttgg gggaaaaagt gtgggggct
                                                                      420
tggacctagg aagaagctga gctgaattcc tccagggccc caggtgaaac cccccagggg
                                                                      480
agtttctgag actctagact tgccatttct ccacttttcc ttcccaatga ctccggtgag
                                                                      540
cageteagag tetgggetag ggcaactggt aggacagtgg ggatetgeec cagagacate
                                                                      600
tgtgggtttc agatgaaggt ttccccaaca ccagattcat ttatatgtac acagggcagc
                                                                      660
acceaectge ggeaggggga acageegetg ggggetagta agagtageea ceettgggge
                                                                      720
caaatggctg ggcggggcca gccagctctg ggaggtaggc ggggctctca tccaagtggg
                                                                      780
acaaagggac tgtgtcctcc tcactgacag gccggtcaaa ctcagccttg agagctggac
                                                                      840
getgattgte egggaaggee aaagagaaga gggeeteggg eteacacaca aacttgtaca
                                                                      900
egtaacgete accagecace ttetgeatga tgeetttete ataatagtat eggagegage
                                                                      960
ggeteagett gtegtaatte atggetggee ggttettetg gatgeeceag ageetggega
                                                                     1020
cctcctcagg ctcaatgagc ttgaactcca ttccccggcc cgtccaggca atgaaatggg
                                                                     1080
catttgttgg gtcatccagc aaggccacca gaaattgcca cagctgcagg gcaccccggc
                                                                     1140
gctggtaggg cggcccctct cgaaatgcac cgaccccttc ctgcttgatg tctccttcaa
                                                                     1200
atttctcagg gacaacgcag acatcatctg ggaatggtcg cagaggtttc tcatagccat
                                                                     1260
ageceatgge ecegteacet ggagagggee cagagaagee etetgtgtgg aggtacattg
                                                                     1320
atgcgcaccc ggtgacatct gagtcgtagg cgaagtccgt ctgttcctgt ttgatcacca
                                                                     1380
eccegecce tgggtacetg tgeccattga ecceacetg gtecaegget ggetggeeg
                                                                     1440
cctgttcata caggggatca tggtattctt gcttaaagct ctgctgggga tagggtgggc
                                                                     1500
agggeteega eagetggtgt tggtaggggg eetgggaggg gtteeeggee eeeteeetga
                                                                     1560
gatgtgaagg agtggcaaat gtccaggggc tgctggaaga cggagctatg ttccccgagg
                                                                     1620
tacccatggc cagggtgggg ctgggaggtg ccagaggatc tcaggaaatt ccgttgctct
                                                                     1680
gcccggggaa agggctgtag gggcgactgt ccaagggcac caggggcagg ggacttgatt
                                                                     1740
ggcgatttgt ctgggggggt cataggcact ggagtaaagg cactgctcgc catggtggta
                                                                     1800
ggggagtggc ggcttcctgc tgcaggacag ggccgggtct gtgcggggac tctggggctc
                                                                     1860
cttcttgatc ctggtggtgg ggctgtggaa agctaggttt tctgaatgga aatcaggaac
                                                                     1920
aaactgetea teaetgtetg gtaeetgage tteagegage caegteteet ggaagtgaet
                                                                     1980
tagatcctgg aagagatctt cagagtcgag gggcggcagg gagcccgggt ccatgagctt
                                                                     2040
ccccagcggg ccgatcagcg cttcgcgcaa gtctcccatt tccgggcgat ttgctgctga
                                                                     2100
```

```
aggtgtaggg cacttgctgg tccaagtate eggettteat ecteegetee ateeggeege 2160 tecetegege egeacggeeg gggeeceaag egggggeega gacetgagge egggggegtet 2220 gggetggage egegggggt acegageatg ecetggagee egeacegagg geegegggge 2280 taggeeggag taaggeege eeggeecegg gteeceageg eacegaettg ttttteggge 2340 geageagaea gtt 2353
```

```
<210> 3607
<211> 2658
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1981)
<223> similar to gi3201589 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3607 atggaccgcg gcacgctccc totggctgtt gccctgctgc tggccagctg cagcctcagc 60 cccacaagtc ttgcagaaac agtccattgt gacctttcag cctgtgggcc ccgagagggg 120 cgaggtgaca tataccacta tgccaggtct cgaagggctg cgtggctcag gcccctgaat 180 gccatcctgg aagtccatgt cctcttcctg gagttcccaa cgggcccgtc acagctggag 240 ctgactctcc aggcatccaa gcaaaatggc acctggcccc gagaggtgct tctggtcctc 300 agtgtaaaca gcagtgtctt cctgcatctc caggccctgg gaatcccact gcacttggcc 360 tacaatteca geetggteac ettecaagag ecceeggggg teaacaceac agagetgeea 420 teetteecca agacceagat cettgagtgg geagetgaga ggggeeccat cacetetget 480 gctgagctga atgacccca gagcatcctc ctcctgactg ggccaagccc aggggtcact 540 gteettetge atgetggaag ceagecaggg acatgggeeg caegetegag tggegeget 600 tacttccage etttggtccg gggetgccac ttggaaggeg tggccggcca caaggaggeg 660 cacatectga gggtcctgcc gggccactcg gccgggcccc ggacggtgac ggtgaaggtg 720 gaactgaget gegeaceegg ggatetegat geegteetea teetgeaggg teeceeetae 780 gtgtcctggc tcatcgacgc caaccacaac atgcagatct ggaccactgg agaatactcc 840 ttcaagatct ttccagagaa aaacattcgt ggcttcaagc tcccagacac acctcaaggc 900 ctcctggggg aggcccggat gctcaatgcc agcattgtgg catccttcgt ggagctaccg 960 ctggccagca ttgtctcact tcatgcctcc agctgcggtg gtaggctgca gacctcaccc 1020 gcaccgatcc agaccactcc tcccaaggac acttgtagcc cggagctgct catgtccttg 1080 atccagacaa agtgtgccga cgacgccatg accctggtac taaagaaaga gcttgttgcg 1140 catttgaagt gcaccatcac gggcctgacc ttctgggacc ccagctgtga ggcagaggac 1200 aggggtgaca agtttgtctt gcgcagtgct tactccagct gtggcatgca ggtgtcagca 1260 agtatgatca gcaatgaggc ggtggtcaat atcctgtcga gctcatcacc acagcggaaa 1320 aaggtgcact gcctcaacat ggacagcctc tetttecage tgggcctcta cctcagccca 1380 cactteetee aggeeteeaa caccategag eeggggeage agagetttgt geaggteaga 1440 gtgtccccat ccgtctccga gttcctgctc cagttagaca gctgccacct ggacttgggg 1500 cctgagggag gcaccgtgga actcatccag ggccgggcgg ccaagggcaa ctgtgtgagc 1560 etgetgtece caageeega gggtgaeeeg egetteaget teeteeteea ettetaeaea 1620 gtacccatac ccaaaaccgg caccctcagc tgcacggtag ccctgcgtcc caagaccggg 1680 teteaagace aggaagteea taggaetgte tteatgeget tgaacateat cageeetgae 1740 ctgtctggtt gcacaagcaa aggcctcgtc ctgcccgccg tgctgggcat cacctttggt 1800 gccttcctca tcggggccct gctcactgct gcactctggt acatctactc gcacacgcgt 1860 teccedagea agegggagee egtggtggeg gtggetgeee eggeeteete ggagageage 1920

```
agcaccaacc acagcategg qaqcacccag agcacccct getecaccag cagcatggca
                                                                     1980
tageccegge ecceggget egeccageag gagagaetga geageegeca getgggagea
                                                                     2040
ctggtgtgaa ctcaccctgg gagccagtcc tccactcgac ccagaatgga gcctgctctc
                                                                     2100
egegeetace ettecegeet eceteteaga ggeetgetge cagtgeagee actggettgg
                                                                     2160
aacacettgg ggteeeteea eeceacagaa eetteaaeee agtgggtetg ggatatgget
                                                                     2220
gcccaggaga cagaccactt gccacgctgt tgtaaaaacc caagtccctg tcatttgaac
                                                                     2280
ctggatccag cactggtgaa ctgagctggg caggaaggga gaacttgaaa cagattcagg
                                                                     2340
ccagcccagc caggccaaca gcacctcccc gctgggaaga gaagagggcc cagcccagag
                                                                     2400
ccacctggat ctatccctgc ggcctccaca cctgaacttg cctaactaac tggcagggga
                                                                     2460
gacaggagcc tagcggagcc cagcctggga gcccagaggg tggcaagaac agtgggcgtt
                                                                     2520
gggagcctag ctcctgccac atggagcccc ctctgccggt cgggcagcca gcagaggggg
                                                                     2580
agtagecaag etgettgtee tgggeetgee eetgtgtatt caccaccaat aaateagace
                                                                     2640
atgaaaccaa aaaaaaaa
                                                                     2658
```

```
<210> 3608
<211> 843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(844)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (71)...(489)
<223> similar to gi2088669 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3608
 gaateettat tatatteeae attetaagtt aagtgettta eatggaatat eteatttaae
                                                                        60
 ccacaggata atcaagggcg ggggacttct caagtacagc aaccttcttg tgcgggactt
                                                                       120
 caggcccaca gaccaggaag aaatcaaaac totagagcgc tacatgtgct ccaggttctt
                                                                       180
 categaette eeggaeatee ttgaacagea gaggaagttg gagaettace tteaaaacea
                                                                       240
 cttcgctgaa gaagagaaa gcaagtacga ctacctcatg atccttcgca gggtggtgaa
                                                                       300
 cgagagcacc gtgtgtctca tggggcatga acgcaggcag actctgaacc tcatctccct
                                                                       360
 cetggeettg egtgtgetgg eggaacaaaa catcateee agtgeeacea acqteacetq
                                                                       420
 ttactaccag coggecectt acgtcagtga tggcaactte ageaactact acgttgccca
                                                                       480
 tectecagte acctacagee ageettacee tacetggetg ecetgtaact aacettgaga
                                                                       540
 cctgagggtt tccacagtgg gaaccccaat agggctaggg ctctcaggta ggggagcctc
                                                                       600
cttctagatg taggcatttg gcttttaaag gggaactcag ctctgattct gcnnnnnnn
                                                                       660
 nnnnnnnct ttggggcccc catggaaagg ggtcaacggg gaatcaggac ccaccctaa
                                                                       720
 agggccccgt tttacaggcc cttgtggaaa acccctccgg gaggcgggcc ctatccactt
                                                                       780
 ttttccaaaa taaacactac cttgtttggc cccaaactta agcagggggg ggtggggctt
                                                                       840
                                                                       843
```

```
<210> 3609
<211> 3965
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3966)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3) ... (3504)
<223> similar to gi5689573 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3609 gacgggctgg ggaggtggtg ccaggctggt tgctagctgc cgccgctgct caccccggcc 60 gtccggccgc ttcattgtca ccgggcctcg gggcagtgtt gggggtggcg gggcgccagg 120 tegeogacce gaggittegg egegaciggt teegealeee eleecegeeg geegaaleig 180 caggeceege gegeeaggea ggettegegg etgegeeeee ggeeegegea ggaeetgeet 240 tgtccaccat gaaaggcacc cgggccatcg gcagcgtccc ggagcgcagc ccagcaggtg 300 tggacetgag tetgacaggt eteceteege etgtgteeeg gegteetgge agtgeegeea 360 ccaccaagec categicege tetgieteeg tggicacagg cagegageag aagaggaagg 420 tgctggaggc cacagggcct gggggctccc aggccatcaa caaccttaga agatccaaca 480 gcaccacgca ggtcagccag cctcggagcg gctcccccag gccaacggag cccacagact 540 tectgatget ettegaggge ageceeagtg ggaaaaagag geetgeeage etgageacag 600 ccccagcga gaagggagcc acctggaacg teetggatga ccageccegg ggetteacet 660 tgccatccaa tgcccggagt tccagtgccc ttgactcacc agcgggcccg cggaggaaag 720 aatgcaccgt ggccctggcc cccaacttca ctgctaacaa caggagcaac aagggagcag 780 tgggcaactg cgtcaccacc atggtgcaca accgctacac cccctcggag agggcgcctc 840 cgctcaagag ctccaaccag actgccccct ccctcaacaa catcatcaag gcagccacct 900 gtgagggcag tgagagcagc ggctttggga agctgccgaa gaatgtctcc agtgccaccc 960 actcageceg gaacaataet gggggeagea egggettgee eaggeggaag gaggtgaegg 1020 aggaggagge tgagaggttt atccaccagg tgaaccagge cgctgtcacc atccagcgct 1080 ggtaccggca ccaggtgcag cggcgcggag caggagctgc ccgcctggag cacttgcttc 1140 aggccaagcg ggaggagcag cggcagcggt caggcgaggg gaccctcttg gacctgcacc 1200 agcagaaaga ggcagccagg aggaaggccc gggaggagaa ggcacgccaa gccaggcgag 1260 cagccattca ggagctgcaa cagaaacgag ccctgagagc ccagaaggcg agcactgccg 1320 agcgtgggcc acctgagaat cccagggaga ccagagtgcc aggaatgcgg cagcctgctc 1380 aggagetgte ecceaegeea ggeggeaetg eccaeeagge ecteaaggee aacaatgetg 1440 gtggtggcct ccctgctgca ggccccggag accgctgcct gcccacctcc gactcatccc 1500 cagaaccaca gcagcctcca gaggacagga cgcaggacgt tacttgccca ggatgcagct 1560 ggggacaacc tggagatgat ggccccgagc agggggagcg ccaagtccag ggggccactg 1620 gaggagetge tgeacacact geagetgetg gagaaggage eggacgeget geecegeece 1680 aggacccatc acaggggcag atacgcctgg gccagcgagg tgaccacgga ggatgacgcc 1740 agetetetga cagetgacaa ettggagaaa tttggaaaae teagtgegtt eeeegaacet 1800 cctgaggatg ggacgctgct atcggaggcc aagctacaaa gcatcatgag cttcttggac 1860 gagatggaga agtctgggca ggaccagctg gactcccagc aggaggggtg ggtgccggag 1920 gcggggccgg ggcccctgga gctggggtcc gaggtgagca cgtctgtgat gcggctgaag 1980 ctggaggtgg aggagaagaa gcaggccatg ctgctgctgc agagagcgct ggcgcagcag 2040 cgagacetea eggeeeggeg ggteaaggag acagagaagg caetgageeg geagetgeaa 2100 cggcagaagg aggccctacg aggccaccat ccagcggcac ttggccttca ttgaccagct 2160

```
gattgaggac aagaaggtee tgagtgaaaa gtgegagget gtggtggeeg agetgaagea
                                                                     2220
ggaggaccag agatgcaccg agcgtgtggc ccaggcacag gcgcagcacg agctggagat
                                                                     2280
taaaaaactc aaagaattaa tgagcgccac cgagaaagcc cgccgggaga agtggatcag
                                                                     2340
tgagaaaacc aagaagatca aggaggtcac tgtccgaggt ctggagcccg agatccagaa
                                                                     2400
gctgattgca aggcacaagc aggaagtgcg gaggctcaag agcctgcacg aggcggagct
                                                                     2460
gctgcagtcg gatgagcggg cctcgcagcg ctgcctgcgc caggccgagg agctgcggga
                                                                     2520
gcagctggag cgggagaagg aggcgctggg ccagcaggag cgcgaacgtg ctcggcagcg
                                                                     2580
gttccagcag cacctggagc aggagcagtg ggcgctgdag cagcaacggc agcggctgta
                                                                     2640
cagtgaggtg gctgaggaga gggagcggct gggccagcag gcagccaggc agcgggcgga
                                                                     2700
gctggaagag ctgaggcagc agctggagga gagcagctct gcactgaccc gagccctgag
                                                                     2760
ggctgagttt gagaagggca gggaggagca ggagcgccgg caccagatgg agctgaatac
                                                                     2820
cctgaagcag cagctggagc tggagaggca ggcgtgggag gccggccgca ccaggaagga
                                                                     2880
ggaggcgtgg ctgctgaacc gggaacagga gctgagggaa gaaatccgga aaggccggga
                                                                     2940
caaggagatt gagctggtca ttcaccggct ggaggccgac atggcgctgg ccaaggagga
                                                                     3000
gagtgagaag getgeegaga geegeateaa'gegettaegg gaeaagtaeg aggeegaget
                                                                     3060
ctccgagctg gagcagtcgg agcggaagct tcaggagcgg tgctcggagc tgaagggcca
                                                                     3120
gcttggggag gccgagggcg agaatctgcg tctgcagggc cttgtgcggc agaaggagcg
                                                                     3180
ggcgctggag gatgcgcagg cggtgaacga gcagctttct agcgagcgca gcaacctggc
                                                                     3240
ccaggtgate egecaggagt tegaggaceg ggetggeage etetgaggag gagaegegge.
                                                                     3300
aggecaagge egagetggee aegetgeagg eeegecagea getggagetg gaggaggtge
                                                                     3360
accggagggt gaagacagcc ctcgcgagga aggaggaggc cgtgagcagc ctccggacac
                                                                     3420
aacataaggg ttcgggtgaa gcgggccgac cacctggagg agctgctgaa gcagcacagg
                                                                     3480
aggcccacgc caagtaccaa gtgtccaggg atgccgggaa cactgtttaa gaacggaagg
                                                                     3540
caaaggacaa aggctggacg tgggcccaga ggcccacagg gacgcccacc tgcccccac
                                                                     3600
agaggctggt ggttgagatg cccacggcta agcacctgtg gctgcatttt aacagtaaag
                                                                     3660
gaggccgttg ttttcagcaa aaaaaaaaa aagggggcgc ccttttaaaa gaatcaattt
                                                                     3720
ttattcccgg gggcgggaaa ggaaaaattt tttttttggg gccccaaaat taaattccgg
                                                                     3780
ggccggtttt ttaaaacggt gggggggaa aaacccgggg gttccccaat ttaaaccgtt
                                                                     3840
tgggaaaaan gnnnnnnnn nngnnnnaan nangnntnct tnntgagata ttttttgtc
                                                                     3900
ttgcctacac gggtggggtt ttgattttag ttaaaaccat tgggggggttt ggaaaatact
                                                                     3960
                                                                     3965
```

```
<210> 3610
<211> 1539
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(683)
<223> similar to gi971251 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3610

cccacgcgtc cgcaaggcca gggacctgtg accatggaag cagagagaag caaggccaca 60
gccgtggccc tgggcagttt cccggcaggt ggcccggccg agctgtcgct gagactcggg 120
gagccattga ccatcgtctc tgaggatgga gactggtgga cggtgctgtc tgaagtctca 180
ggcagagagt ataacatccc cagcgtccac gtggccaaag tctcccatgg gtggctgtat 240
gagggcctga gcagggagaa agcagaggaa ctgctgttgt tacctgggaa ccctggaggg 300
gccttcctca tccgggagag ccagaccagg agaggctctt actctctgtc agtccgccc 360
```

```
agecgeeetg cateetggga eeggateaga caetacagga tecaetgeet tgacaatgge
                                                                      420
tggctgtaca teteacegeg ceteacette cecteactee aggecetggg ggaceattae
                                                                      480
tetgaggget ggeeegetee etggeaagga tataceeeta eetgtgaetg tgeagaggae
                                                                      540
accactcaac tggaaagage tggacagete ceteetgttt tetgaagetg ceacagggga
                                                                      600
ggagtetett eteagtgagg gteteeggga gteeeteage ttetacatea geetgaatga
                                                                      660
cgaggetgte tetttggatg atgeetagge ccaaaggaga ggeeaaaagg gaaaccaagg
                                                                      720
ctgcacacct agaaccccaa ttcagcctcc tgggcacccc agaggcaagg ctgtgcactc
                                                                      780
agggagggag ggtgggacac agaggtgcat ctagggtccc acctgtaccc ttqctctttc
                                                                      840
etetettage cettagaagt cacetaette ettecagtge catgatecca cetgegaeet
                                                                      900
ctagtgcgag tgcagagaag gtgggaccag ggccagggtt ccaaaaagag aataagcctc
                                                                      960
ctggggggtc tgacctagtt agttcttgag tttggggttt ccagtaccat ctggatgccc
                                                                     1020
tgcctgttga gccccattct acatccccac cattaaccag gccccaccca caaggtagaa
                                                                     1080
acaaccccta gagtcaacga gaaagtcatt ttcagaaaat ctacaagtct cgttgagacc
                                                                     1140
accaccatac ctcagaaggt aggactgtgg cctagaaggg aaaggaaagc tgagatgatg
                                                                     1200
tettacegta geageagate ttggatggte caggetetat gtgaceteca gageaaagag
                                                                     1260
aaagacttcg gacagtctag gtcctcaaat gtcccccatt gaggacaaca gccccagctc
                                                                     1320
tttttctttt ttttgagacg gagtcttgcc ctgttgccca tgctggagtg caatggcacg
                                                                     1380
ateteagete actgeaacet ceateteetg gatteaaaca atteteetge eteageetee
                                                                     1440
agaatagctg ggattacagg cgtacaccac catgcctggc taattttttt gtattttag
                                                                     1500
tagacatggg gtttcaccac attggccagg ctggtgtcg
                                                                     1539
```

```
<210> 3611

<211> 2972

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2973)...(1101)

<223> similar to gi4835895 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3611
ctctgctgaa gtttctgatc aaaaggcaaa gagaggcatt gctcacattt tctatgtata
                                                                       60
ctttgcaaca tatettttaa actgaeccaa actggaagaa caaacatata taccegttae
                                                                      120
tgaataccag aaatattgaa ttaaatgtca aactcagtct gatttgcttt aaacaagtga
                                                                      180
taccatatac tatetttaga aattteaaga aaacatgaac ttatettgae catttteeag
                                                                      240
aaagtagtet ataccaacaa gatttgtaca gatgtttetg tttggagaca ggcagaacca
                                                                      300
atttagggct taccaaattg tgttcataac aaactgaaaa aaatctctag tacacagtac
                                                                      360
acaactaaaa aatataatag aaatataaag atatctaggg gaagaaataa agcttttcac
                                                                      420
tttctccatc agaaccaagg ttcttcatgg gagtaagact atagaaaagg caaaatcaca
                                                                      480
ggttactgac agccctcagt tattaagaga cacatgacaa catgaatcat tatagaaatc
                                                                      540
agcagcaatg aattctatga ttatacaaag caaaaaagtc aaaaaattct ggacacagat
                                                                      600
ttgactgtag gcctgaaaaa agaacctcat ccagatattt ggtgcacaga aagcacatgc
                                                                      660
cccatgtgca ttcaactttt gtgcttttct tttgtgcaca aaacctgata caacagagga
                                                                      720
tettaggeeg gaccatagta aattaaaaat tetgaaaaag tatecaaaaa ttaaagcate
                                                                      780
aatteetagt tgtgatteaa agttgatttt tttttetett etaggageaa geaaataaaa
                                                                      840
atatagecat atacatgtaa tittacatgt atttatagtt atatgetgag caaggagate
                                                                      900
tagcaagaga tagctagtgt tagatgttca gctttgctat tgcaatattt tgtcattttt
                                                                      960
gtacacaagg ccaaggtett gggccacaga caaggetata gatectacgt tecagettag
                                                                     1020
```

```
agcattcage ttttttttt ettttttet eccaeatgga atgteacaea ggeettgett
                                                                     1080
cagtcactqt taatactaga acaaaatagg ctttcctgca gttttttctt qqacqtaaqa
                                                                     1140
agtaaaacgt tttagaaatt taggatactc tcgctttgcc actgccctta acactgaggg
                                                                     1200
tgggtgccca tcctccaggg ttcacattag ctacatatgt aatcttgcat agaatgttgt
                                                                     1260
ccctgctaat ttcctggttt cccctctggg gggcttacca aggtttgaca aatcataqca
                                                                     1320
acatttattt tggcacggac acatcggttg tttagaggag cactgtcatg atccacagaa
                                                                     1380
aaattacaaa ctatccaagt ttcagggtca ttttcagtca aggctggtat ctttcgaatg
                                                                     1440
acagaaagat ataatacgtc tcgctgagaa gcaggccaca ccctcttgtg tgtttgataa
                                                                     1500
atgatgattg cattatcage taatgtttce accacatgaa agttttctat agttgtttce
                                                                     1560
cagtcattgc gaacgtcaac attccagaaa taattgcaga cttcatgtcc tgtgacgcct
                                                                     1620
ttaactgcat gggtagcttt taaaggatcc agaacaatcc cattttcttc tacttctctt
                                                                     1680.
ctgtatacct tcatttctcc ttcttctaca accaactgcc aattggcatc tccgcctaca
                                                                     1740
teetgtaatg agtaagteat gtggttetge accatetett caacetggga getgaatetg
                                                                     1800
tgaacatcat cagaggccct ggctagatca atggaagaca tggaggaaga gcgactatag
                                                                     1860
ggcttttgga caaatctatg tgtccccaca gaagaaaagg catctccaga gggcaaggat
                                                                     1920
gtaggecaat gtaateteae etttteaete tgtgaetgtt ettetatttt atettgtetg
                                                                     1980
tcaagagcag cttcaacagc atcaaagaac tcttcttcat taatcagact gttagggcct
                                                                     2040
tottcataat ctggtcctcc aaagtgggat tttttcttaa gttctgtcat tgcattttta
                                                                     2100
tatgetteet etgttettet tttettetea gttteettat ecagtetett etgeeagetg
                                                                     2160
tectcaegtt taaccattag tteaatacaa tgagaaagtg ttgcaaggat tecageagta
                                                                     2220
gttgctttaa aagttatcgc ttccccttta aagtctatac cattaattcc ttttggtgtc
                                                                     2280
acatgtggaa ataacttttc tttattgccg ttggtactat gcaagaagtc accatcagaa
                                                                    2340
egegttgtag gaaagteate tteateatet tetaceaett tateeetttg aagtteatee
                                                                    2400
ttagagacag catcagcaca ggcatcaaag tacttctgta gcgtgtcaac ttqtctacat
                                                                    2460
aagatgtete taaatgttte cattteagee aactteteac gtaaactgtg geetttettg
                                                                    2520
aatgaagagg tggatgttgc agagtagcca cttgctccag acaccaggga caccattgag
                                                                    2580
ccatgtcgac gcaagctgga ttcagatcca tatccagatt cagtcttgtg ctgttcaatg
                                                                    2640
gcatctatcc attgctgtct atgatctgga tcctgagcac gaagatacca aacactatca
                                                                    2700
tttacactaa tatcaaatcg acattcatca aaatcgtgag gtgtgatgac agccttgcta
                                                                    2760
agacagatgg atcetetgea gecatactet gitteatett cagatttgta gtaactcaga
                                                                    2820
gcattatttt tcaaaactac ccaacgatcc tgccacccat gaatgtagtt tgtccactta
                                                                    2880
ctgaggàcec egeagegete cacaggegge ccagaeteeg tetetggate etectecgag
                                                                    2940
cccgacgagt tccagctctg attatccgac at
                                                                    2972
```

```
<210> 3612
<211> 2408
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2409)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2410)...(784)
<223> similar to gi5305448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3612
tttttttttt ttcgagataa acctttttat ttatttatgc ttctccattt tgtttaaaac
                                                                       60
aacaacaaca accacettaa tgtaactgac agceetteee eetcaceetg cetegggetg
                                                                      120
ggggtagtta atggggaaat ggcccccagg gtggggctga ccagaagagc ccctcaagga
                                                                      180
gctcatggag cccaaatccc ctgccctggg gaggggacct gtagtgtgtg acgggagcct
                                                                      240
ctcccgagcc tetgettgta ccatcaaaga tgcccttggc caacaagggt caggaagcat
                                                                      300
99999aggga tttcggcctc ctctgtccct acccagccca atctcacgag cagggctqqq
                                                                      360
gggtttaaaa agggtggagc gggtggggtt ggctcacacg aaggagtact ggttgttaaa
                                                                      420
tggcccctgg ggtggccccc ttcctctcca tcacccccct agtggtgact gctgcagctg
                                                                      480
caccaattgg gggcaccccc gcgtccccac caggacccag gcgcccttgg gcctcttgag
                                                                      540
cctggggcct atggccctct cccaattcac ccaccgggac cagctaaacc acggggacca
                                                                      600
gestetteeg ggassestes accegesegs titetetite tettgestet stittggstge
                                                                      660
tgcggctgcc tnttgcccgc cacttcctgg cgcccctcga cgcctctttc ttccccaggc
                                                                      720
tgtgggggat ctgtccatga agggggttca gggggctggg gtgggtcatg ggaggtggtc
                                                                      780
ggttacacag tcactcgctc cgaagggcat gagggtgcag gaggcattcg gggtggcatc
                                                                      840
catetecete geacacecee geatggetee cageetgete eeggeeteae ttettgggtg
                                                                      900
cacgggcacc tectecectg cagacetget etgeteacce tgetgteget gggaggatgg
                                                                      960
gacatagetg acaaggacaa catcactgga geeteeegae tecaaaggga tggggtgeae
                                                                     1020
ccggaagtgc tcgagcatat cgaaaatgga ctggaaccac aggtgctgga cccggcactg
                                                                     1080
accetected theagegaca aacgeaggtg ettggeettg eeetggaagt tgaaggtgag
                                                                     1140
gacgtattca eccegeettg teteactetg gegeaceagg aagacacegt gggagecagt
                                                                     1200
gccgccagtc agcaccaact gtgcagcctt gagccgagag agcatcccgt ggaaccaagg
                                                                     1260
ataccetgag aggggetggt ecceetcace geeetetgge tecceeetgg aacaggaagg
                                                                     1320
accetgtgge tgtttccgga gtgtccaagg gagggtaggg ggctgagagg ggatgaactg
                                                                     1380
tecetgetgg gggteeetet teaatgggga tgegggggg caactetggg ggaageagtt
                                                                     1440
ccatcgagtc aaaatgggag gcggcaatgg aggcagagct gggggagatg gatgccgagg
                                                                     1500
ggcggtctga gaggccccca tatgccccct gcgacaggcg gtcattgctc tcgctgggtc
                                                                     1560
caagcagcag gtcctggctg ggtagactct ccgagtgatt caggcaggac agctccaggc
                                                                     1620
tgtctgtgtt ctcccttgta aggaatgagg tcccaggggc cagagggagg gtcatgggc
                                                                     1680
ggggactggt agcagggcag ggtcctgggc tcaggcattc ttggatgtca gacacccagg
                                                                     1740
cetteacatg etgggeatee actgteteea tgatatacte ggatggaeet tecacettaa
                                                                     1800
ccacaaacgt gttctcccgg tcaggcatct ccagggctgt ggttgtccgg acgtctgtga
                                                                     1860
tagaagagca ggggatgctg agtcggggcc gagaggcctt gggtggtaca aagaactcca
                                                                     1920
ggcgacttcc tecteett teteetteae ttegaageag caggegacae ttetgecaet
                                                                     1980
gaggetgeec tecteceet gaaggaggee cagecaceec tectecegg eccaeteegg
                                                                     2040
ctgggtcagg ggctgcctcc tcagccccca tgaaactcag cagctcttcc ctctgcacca
                                                                     2100
tecetgetee atcetteaag gegeeecete eeegactgag teteageete teaaaaeggt
                                                                     2160
gagtccatct ttccccaggg gacgttccat cactgaccag tcccctacca acggtcccag
                                                                     2220
ccccgccaga ggagttggag ttgctgtttc cacctaagac tggggggcct gacgaggtct
                                                                     2280
ccaggggccc agcggaggag ggagggtcaa cggtcccccg ccactgcagg atgccacgga
                                                                     2340
ctgagcctcg gacagagcga cccactgaac gcagggaaaa gcgcttcttg agcttcggct
                                                                     2400
tggäggag
                                                                     2408
```

```
<210> 3613
<211> 2204
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1803)...(980)
<223> similar to gi4218005 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3613
ttggggaacc cccagggttt tcccatccc ccggtgtaaa accgcggccc aggaaatgga
                                                                       60
ttttgggggc cccataaaaa aacttttgcg ttgccagccc ccggacgtta acctggatcc
                                                                      120
tttaaaacgg ccccccttt ttttttttt tctttaacaa aatttttatt taataaatgg
                                                                      180
ttaaaatcgc agtgccaaaa atacattgac atttagcaat ttcactgaaa ggaagaaact
                                                                      240
acagaatgca cggtttcaga aagctatttt aagttattta caaataaagt atctaaaact
                                                                      300
caaaaacagg ctctgtatgc tatatctagt ttatcccttc ccgaacaaaa tttctgttat
                                                                      360
ttgggcaaat tottaaacca tggtttaaac cgtaatggtt acaaaccaca aacacatcca
                                                                      420
tccagagact gaaaccgttt ctatccggtc agtggcaaaa ctgttgaaag ggcaatagtt
                                                                      480
gaagctgttg ggttttatat agtgtgaact ctgataaata ttcctaccag gactaaaaca
                                                                      540
cagcacgett tgcgggcatg getgaeteae aaaggttgta acaaacaaga actaetette
                                                                      600
actegacace atggeteaga ggecacegag aageaegagt gaetgacage teetetgett
                                                                      660
acaaacgaat gaaacccaaa gtggatgtcg ttctcacagc actgaaagtg cttcaggact
                                                                      720
cacactgate caatactaac tttetteeet attttacaca tatttteta etgtecagtg
                                                                      780
gaaatcattt tetgttttgg etaaacaaca aatactagtt tataacagga atggtaaaat
                                                                      840
ctgtgagaat tctgctcaat ttaatacaag atcactactt tctttagaat ggtttctgcg
                                                                      900
tgtttctacg tcaccctctg tatttttagc ttccagtttc ctggtaagga ataagttctc
                                                                      960
cttcccagtc acactcgggg tcatttacac gtttctggga tgcccttgct cgtccatgga
                                                                     1020
ggccaggtgc gtgcagtgac tcactctgcc tcttccctct tctcaggacc agtccccgaa
                                                                     1080
cettetgeet tgeagateet cetgttteeg ceacactete gegeteggaa gegageteet
                                                                     1140
ggatcataca gctgcaaggc tggccggtcc ttgtttgcca gtcgctcttt tctgggtgct
                                                                     1200
ggactgtcgt cacacctctg cgctcttccc agtctctcca tggcctcccc cggagccccg
                                                                     1260
etgteetgge teceettett ceetetgtet tggeeaggte ettteeceea tetetgetea
                                                                     1320
tecteactee ttetggaaag cegtteagge tegtggtgag etetgtgeet cetgeegtea
                                                                     1380
tecacateget atetttegte ttecagattet tettettegag atetetecae atecetetee
                                                                     1440
tetttateae tgeegetgtg tgaegtetee tggggeteet eeagegagee tteeatqqqe
                                                                     1500
ctggctttta cgactgcacc gggggcacag gattcctgct tgccacctcc agtatcaatc
                                                                     1560
tectetecte titetitigg titetetgig gitggitect etecetitic tggittetta
                                                                     1620
agaagettaa teettaette titetetgea attitettet gittatetgt etettitt
                                                                     1680
ttgcatcttt cttcttctct tcttcttctt ttttcctctt cccqcaaacq tttctttct
                                                                     1740
aactetetee teeteegtte ttetegette tettetegaa ttetetgett ttetaatttt
                                                                     1800
ctatttttaa tatattccaa aagaggtgtg gttcttctag caatgagctc tcttgtcttc
                                                                     1860
gestecatet seessageag agteteaggg ttggsactgg tettetette stecasagag
                                                                     1920
taggtttcta aaaacttctt atattctgga tctttgctgt caaggaagat atatccatca
                                                                     1980
aaacgatete taaaaagaag gatgteatea ggatteetaa aattaatgta tgetettgag
                                                                     2040
tagagatgag gataaagact caggtcggcg gcgaagaact cgaagtagtc gtgtgctggc
                                                                     2100
agegggegea getgeteete cagetgetee ttggtgagge eeggaggeag geggeggatg
                                                                     2160
accacctgcg gggagcgcgc ggccgttccc accggggcac gaaa
                                                                     2204
```

```
<210> 3614
<211> 823
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (777)...(278)

<223> similar to gi5019453 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3614
ttttttttt ttcaccggca gcttccactc tttatttcca aagaatcagt gtcacacatg
                                                                       60
cagatcacaa agogggtoto cotgtgotgo ttoottotgt gftttotagt ototococca
                                                                      120
ggggctgccc agggccctca ggaactgagt gtgggcaaga cactgctggg ccagagggca
                                                                      180
cgacgcccac gtgggcccgt attgcccagg ccatttggca gtgcagagcc cccccagcct
                                                                      240
ccagcaggag ccccctggca tgagctctcc cctcaggggt cctgagcaac gtccctgcca
                                                                      300
gggctggtgg gtggcagcgg gggggcagac acctcgctga ggtcctgcag cagagcttgc
                                                                      360
agcegetgea ggetggggtg caegttttee tecagecaet eetecaegge ateegggtag
                                                                      420
aaagccaget gcagggcage etecagetee tgcaegaggg tgetecaetg tgccaggagg
                                                                      480
ctgagcgctg cgggctggat gtgctgaacc atgaccgggt ggatgagctt ccgctggcgg
                                                                      540
tggtaggggc tgaaccagcc agtgacatac ctgttgccct ccagcagcgc atccacagag
                                                                      600
ctgcgcagat ggaggctgac ttgtgtgaca agggcaagga tgttgctgcc agggaaggag
                                                                      660
ccggccccct ccctgcggag agccctgctg agaacagctg tctccacggg cgggggaagg
                                                                      720
ggaggggaag aaggggacag ggagggctgc agggtgcttg cctaacaggg tccgttttt
                                                                      780
ccaggetgga aatecegaga aggtteteea etttegettt aac
                                                                      823
```

```
<210> 3615
<211> 4033
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1370)
<223> similar to gi1945155 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3615
accgacggcg cggcagtggc cggcaacccg ggctcggatt acttcccagg agggactgct
                                                                       60
cctggggccc caggacccgg aggcccgtcc gggaccagta gcagcggctc caaagcctcg
                                                                      120
gggccgccca accetecage ccagggggae ggcaccagee tetececcaa etacaccetg
                                                                      180
gaatccacgt cggggaatga cggcaagccg gtctccgggg gcggcggccg gggacggggt
                                                                      240
cgcagaaaaa gggacagtgg tcacgtgagc cctggcacct tctttgacaa gtactcggcg
                                                                      300
geteeggaca gegggggege acetggggtg ageceaggge ageageaage gteaggegea
                                                                      360
gccgtcgggg gaagctccgc aggcgagacg cgcggggcac cgacgcccca cgaaaaggcg
                                                                      420
ctcacgtcgc catcctgggg gaagggggct gagttgctcc tggggggatca gccggacctc
                                                                      480
attgggteee tggaeggegg ggeeaagteg gaeagtagtt egeeaaaegt gggtgagtte
                                                                      540
geeteggaeg aggtgageae gagetaegee aatgaggaeg aggtgtegte eagetetgae
                                                                      600
aacccccagg cactagttaa agcgagcagg agtcccctgg tgaccggctc gcccaaactc
                                                                      660
cctccccgtg gggtaggcgc cggggaacac ggaccgaagg cgcccccgcc cgccctcggc
                                                                      720
ctgggcatca tgtctaactc tacctcgacc cctgacagct acggcggcgg tgggggcccg
                                                                      780
ggccatccgg gcactccggg cctggagcag gtccgcaccc cgacgagcag cagcggcgcc
                                                                      840
ccgccacccg acgagatcca ccccctggag atccttcagg cgcagatcca gctacagagg
                                                                      900
cagcagttca gcatctccga ggaccagcct ctggggctga agggtggcaa gaagggtgag
                                                                      960
tgcgccgtcg gggcctcagg ggcgcagaat ggcgacagcg agctgggcag ctgctgctcc
                                                                     1020
gaggcggtca agagcgccat gagcaccatt gacctggact cgctgatggc agagcacagc
                                                                     1080
```

	gctgcctggt	acatgcccgc	tgacaaggcc	ctggtggaca	gcgcggacga [,]	cgacaagacg	1140
	ttggcgccct	gggagaaggc	caaaccccag	aaccccaaca	gcaaagaagc	ccacgacctc	1200
	cctgcaaaca	aggcctcagc	atcccagcct	ggcagccact	tgcagtgcct	gtctgtccac	1260
	tgcacagacg	acgtgggtga	cgccaaggct	cgagcctccg	tgcccacctg	gcggtccctg	1320
	cattctgaca	tctccaacag	atttgggaca	ttcgtggctg	ccctaacttg	aatgacaaga	1380
	aagatcccct	cctctaccag	gcccttcctc	tccccctgtc	tgtttccttc	cccctcaacc	1440
	ttaccccacc	cctctgttaa	tttgaaaggg	ccactattgc	tgagtggatg	agttttttt	1500
	ttttcctcta	ggttggtacc	tgcttagtgg	catatggacc	ggaaagggtt	aatttaaagg	1560
	gggggaacct	caaaagtttt	tttaaaaaag	aaacttgtct	gccacagtat	gttaccagtg	1620
	ttaacccttc	tgccagttag	caaacttttg	ccttaagcct	ttttcctcta	ggatactccc	1680
	catgtttcgg	taatcttggg	catacatttt	ttaagatgga	cctctttgcc	ttgttttgtt	1740
			agtattgtta				1800
			ttaccccctc				1860
			tggagaatag				1920
			atattgacac				1980
			tattccgcct				2040
			acacagtgct				2100
	ctcttctcct	gctggaagcc	gcccctctct	gcgatggacg	tgaggacgtg	tccagctctg	2160
			atgttcgaca				2220
	tegeaaatge	ccaggccctg	cattttcacg	ctgtgctaaa	gcagcctttg	gtctgcatgg	2280
			tgcagtcttt				2340
	gtgctggagt	tggaggggc	tattctcagc	cctttccctt	ttctgaaagc	tgttcctggc	2400
			gaggggactg				2460
			ccccacccct				2520
			tttgcaggga				2580
			gactttgatt				2640
			atttttttgg				2700
			gaataactgc				2760
			gctgatgcct				2820
	gcacataaat	tccccggtgg	gttagacagg	aagtaactga	tatcacttca	cccaaatata	2880
						ttactaaaac ·	2940
	gctccacttt	gagctccccc	accccctcca	ggtcctcaga	gtttgcagat	ctgggctttc	3000
			ctctgggctc				3060
			gaggagcttt				3120
	tcccctcttt	ccttctgccg	gtccttttgg	ctggggtctg	agtctgcggt	tctcgcctgg	3180
٠	gcagtcttga	cgaggagcaa	accccgcctt	cagagggcag	acaaagcagg	tggcatgaat	3240
	tgatcagcga	gaaaggtgtg	agccgaggca	gttcctgcgt	tctgctacaa	aaggaatgga	3300
			caccatgggc				3360
	actccatgac	ccctctgatt	ctgcagtgta	cagctgtttg	agagcctcat	cattttactt	3420
	ttgaaacagg	aatgatttct	ccttaattgc	ttaaggccgg	ggagcaaagt	gtcttaactt	3480
			gttgagtcat				3540
			agttttaaaa				3600
			taagcaaaag				3660
			aaacacaccc				3720
	gtactgcata	gcaaactctt	tgggaaagaa	aacgaaaatg	ttattgcaca	tgtaaaatat	3780
	gaaaacttaa	ctctgctgtg	tgttaggcaa	tcctgtaatc	ttttttgact	cttaaaagaa	3840
			gttggaagac				3900
			aaaaatatgt				3960
			tectgageag	ttaaataaca	ataaatatga	cgttaatggt	4020
	gaaaaaaaaa	aaa					4033
				•	ı		

<210> 3616 <211> 1203

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(211)
<223> similar to gi4680669 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3616
ggaattcgtt cctcctggtc tccagaacct ccagcctcac tctctccatt gccggcattt
                                                                    60
ttaaggaagt ctgcactttg ctgttggcag ctcatctgct gggcgatcag atcagcctcc
                                                                   120
tgaactggct gggcttcgcc ctctgcctct cgggaatatc cctccacgtt gccctcaaag
                                                                   180
ccctgcattc cagaggtaac ccagagtccc ttccagaagc ctctqttttc tqttctctc
                                                                   240
cetgtgacte tragtgatte tgatgeagga agtgtgeeeg gtggetetge tgeegteact
                                                                   300
cctctaggaa gatgtggggg tcatctccag agtgggtggg tggggcctgg gtgactcagc
                                                                   360
acacatgcaa atcagagcaa accaagaaaa ccacgactgg gcctgtaact qtqqtctctc
                                                                   420
tctatcccaa ggtgatggtg gccccaaggc cttgaagggg ctgggctcca gccccgacct
                                                                   480
ggagctgctg ctccggagca gccagcggga ggaaggtgac aatgaggagg aggagtactt
                                                                   540
tgtggcccag gggcagcagt gaccagccag ggcaaatggc ttagaagcag gccactcccc
                                                                   600
agcctgctgc cagcactcac tgtgctcaag ccgccagggc tcatcatggt agctgggagc
                                                                   660
tgtggacggg agtcaccagg tggtggggcc aagccaggga ctcatgactt ttgcccctcc
                                                                   720
etteagagee tggteacaca aggggegage accaggeeag cetgggaetg gecagagetg
                                                                   780
ggcccaaget gcgctggaat cgcagcagga gaggggagtg ggctggttct tcccaccact
                                                                   840
teccaggete tgacageega gacteattte caaggeacag cagettteta aagggactga
                                                                   900
gtttggactg ggttttggac ctccaggggc tggagcttca tcacctgggc agtgtctttt
                                                                   960
ctcagagagc aggtttcttt atagtttgga aataaatggt tcacggtcca ctggccgcct
                                                                  1020
1080
ttccctgcct ggagccttct tcaaatgtct ggtcttaagc caggcctcct tcattttctc
                                                                  1140
gctcctgtta gaacaccagt cccctcccca ggggggcccc actgcacctg ctggcaggaa
                                                                  1200
                                                                  1203
```

```
<210> 3617
<211> 4826
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4827)...(2413)
<223> similar to gi5689489 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3617
ttttttttt ttatggtttg ctttataaaa gttactataa tacaatggta catagtattg 60
aattcacaaa aatatgaaca aatatttaca tcaagacaca caacggaaac acttctcttc 120
aaaacaagtt acatatggat gatggagtct acccgcacaa acatccctaa aactcattgg 180
```

```
tteteatett tgeaggggga gggagagaaa geaaaaaata geagaaacee ceaactettg
                                                                  240
aaaagcagag atttgttcaa tgaaaaatga gggagttgaa agaaaaatga ctcgacacat
                                                                  300
atcttgatta ttgcaaaccc actctggggc tggggctcct ggggagaggg aggtctagtc
                                                                  360
cccttagtga aggccagccg aggttaacac tgggcacgat ggctggggagc aaggtgaggc
                                                                  420
cagggggagg ggtgaggcaa gggtcccttc cctggtcttc tcgaacaccc ccacttcttt
                                                                  480
tatgggaagg ggacagaatg gagacagccc tttggaggct gtacatgtaa cttgaatcag
                                                                  540
cegtetetae aagetaegea ttteeteatg tgaaaaataa attattteet cagttgeaca
                                                                  600
attaggcaga aaaccgcaaa cggaagagaa gttcgccgct gtgcccaggt accccatctg
                                                                  660
tgtcttgttg ccaccaattt ccttgatctt gaaaccggcg ggcacagtct caaatagaga
                                                                  720
780
aacaaaaaag agaaaaataa caattetttg tacagaattt acatgataac aagettgaca
                                                                 840
caagetgaga taccagagge teeggeegee tgegteegea gggtgggage ageteeetea
                                                                 900
tggagegege teatettgat gaggaeteeg ggteacaaca gteaetttee agaaattatt
                                                                 960
tacacgcete etetgettte tggggtacgg ggggaettge ttttgtettt ttttteettt
                                                                 1020
tttttttgga agtacaaaga aatgagcaaa aaatgtcttc ccgcatgttt ctacaagaaa
                                                                 1080
caatgtteee aagagaaagt cetttgegge ageetetata tacagaagtt ggttetgaae
                                                                1140
ttcaaaaacc tttttcccct tccttttgat tttatacacg cacaagaaaa aaaaaagcca
                                                                 1200
tgggaataaa ttctgaagag atgggaaggg ggtccaaaag ggaaaaaaaa accgtcaagg
                                                                 1260
cttagatttg tggttttaaa atcttttcca agattttcct ttctctggga gaagtaatct
                                                                 1320
geteceteeg aaaataaata tgetetggee ttettaggtt gaggggetge eggtaagggg
                                                                 1380
gatgtggggt gtgggttggg ggtgagtggg tgaagcttat aagccaaaaa atqccacacq
                                                                 1440
cagacggtct gacaacccgt aatggcggga ctgggggacc cgcctgccct tgggagccct
                                                                 1500
gtcccaccca gggcgaaggc aagggcagaa gagagtggct gcccgcgttc tcagcgccc
                                                                 1560
tcacctgcac tggggcctcc gagaggctcc cgcgttgctg gcatccgaat gagaaagtaa
                                                                 1620
acattgaacc caaggtttag ggggtgctgg ggtgtgaggt ggcagggaaa gcccagagcg
                                                                1680
gagacecetg cetgggacag ettageteca teagggteca eegggteagt ggtgeeceag
                                                                1740
gcctctgggg aaggaacagg ctgcagctcg ggtggggaaa ggtgtggggt ctcctcactg
                                                                 1800
tgcccacggg cagtgagggg cgctttcagg gcgtagtgtt ctgaggtcaa ggccgtgggg
                                                                1860
geetecatee treecacage acctggeeet gegtecaggt eegggtgget tecaggacae
                                                                1920
gggccacgca cagccacact gaggcctctg cagacccccg cggggcccct ctctgattcc
                                                                1980
accttcacat ttcaacggtt aaatgtcttt tctcacaacg aggaaaaaaa tagagaagac *
                                                                2040
2100
2160
gaaatcctga aaggggcgtt tgttaaaatg agagagacgt gggctgaacg acagagaagc
                                                                2220
cetttecege ggagggeeg gageeagggg etecaggggg tagtgtgggg egeeaggeee
                                                                2280
2340
ccggggccag gggctccacg ctcgggagtc ccagggctac ggctgacatc ctttgagtct
                                                                2400
ggtgccgggg cctagttgag ggtcccccgg cagttctcgg agccacagag gcaggggatc
                                                                2460
ttgacgtcct cgatggggaa cttatagtca taggtaatct cctcattgac gttaatgtgc
                                                                2520
tgcttcgagt agatgactat cttcttctgt gactccaccg tgatcacctt ggcatagcag
                                                                2580
ttggggttgc agctgtggtt gatgaagcgc gcgaagttgc cgcacttggt ggcgtcgatg
                                                                2640
atggtgtcat ggtccacccg gaacatgtag ctgctcccga tgccctcgtc ctcataacgc
                                                                2700
ttetecegea tgtetgegat cacetgaegg atattetgge ceaegtaete gatgaecate
                                                                2760
tegteageeg egatgggete catggegaac aageeecagt egtgaatgtg getettgeag
                                                                2820
aacttgaget ttttetteeg gaacttgage tggttgaact tgageaggte actgteacag
                                                                2880
ctgccagtga aggaggacag caggcggcgc tgcttccgaa cgccgctccg agcctgcccg
                                                                2940
ggtggaggcg tggggctgtg ctgggatgct catgccctgg gtgtctgcgg ggggctcatc
                                                                .3000
ggtgctggca cggctgctgt tgaggtatct gagcttgtcc ttcttgtcga tggtgtagaa
                                                                3060
geocteactg egggeacage cegteacgtg etegeggatg ceategtece gtttettett / 3120
cttagctgaa gagaggctgg tggagggatg gtagacccag agcgtgtcgt taagccagtc
                                                               ~ 3180
catgocattg teetgetgta geagtegete gtaggtgaea caeaggaage ggatgteete
                                                                3240
ctcatcgatg ccaccgttcc agatgtcata caggatggtc atctcctcaa actccgagcg
                                                                3300
gggccggaag aggggctggg gtggcgagag ttcgggcgag cctgcaggtg gcaccaggtc
                                                                3360
ctcatggcgc ttcttaggtg gccggcgcca cggcccccgg ctcttggcca actccatgta
                                                                3420
ttectcagtg acctcatege geccaegggg geceggagga atggeetegg agggecaetg
                                                                3480
gttgtctagc tccttaaagg gcagcttggt gggctctaca ggtgggggag gtgggggtgg
                                                                3540
gggtggctgg gggggaaggg gtggtggagg ggctgggatc cccgcgttcc ggaagtccag
                                                                3600
```

```
ggtcaccgtc cgggggtcat gggtgctggg gaagacgggg gtctgtggct ggcccggcag
                                                                 3660
gagcaggagt tecettecaa gggeggeece tgetggtggt eggaccaagg geceatecaa
                                                                 3720
3780
gcaagaggcc aggggggggg gcagcagggg tggcagcggg gtgggcgcac gagcctgggc
                                                                 3840
Ccgcaagacg gcgggcaatg ccaagggcaa gggcagggga ggggtagagg gaggggcagg
                                                                 3900
cccgtctcca ggagcaccgg ggaggccagg ggcccggagc gttcatcgcg tcggccagtg
                                                                 3960
gggagtgggc agacgggcag gagcaagggc ccgctgggct cggagaaggt gggtgtgaag
                                                                 4020
ctgaagtecc ggccaggtgt ccgagggagg ccccactgc tcaagctagg ggacggggct
                                                                  4080
gggtaggaga aggggetgee gggeaettge ggagagetea gggaeaggee aetgetgeee
                                                                  4140
cetgatageg ggggeteece geetggtgtg getggeaceg tetetgtget etgegaettg
                                                                 4200
gccaggctgc cacagaggcc tggagtatgc ggggggtggt cctcggcaag gggctccgga
                                                                 4260
gggacagatg ggtgtgaggc atctgtggtc tcaggctccg gcggtgggct gggtggccgg
                                                                 4320
ggtggtcgtg ggggcggcaa tggtggttgc agcggcaagg ggagcatcat agggggctcc
                                                                 4380
ggeteeactt ceaggteatg ttetggaget egeteagggg acaatggggg tegageetee
                                                                 4440
acctecttgg cagggggete tggagacage aacatggeee etteetgget caggeetggt
                                                                 4500
tectcaggeg getecetgga gteegetgge tettcaacac ccacaggeaa ggggggeteg
                                                                 4560
tecageatgg agggeegete eteaggggee acageeteag tetegatgte caceteetet
                                                                 4620
tecatgeeca aegagteeae tgeaggtgee eeeggggeea gageegette eteeeegtee
                                                                 4680
tgctcaaagt cctcagggcc tgcagaagcc atgctttcct cggccaccat ctcctcctcc
                                                                 4740
tectettett cetectette eetggeeact acetectet catecteega ggatgaggge
                                                                 4800
gaggactcgg agcttgactc aaactc
                                                                 4826
```

```
<210> 3618
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (58)...(464)
<223> similar to gil237278 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3618
ctgatcggac atggtacatt cttgagagcc actaacaata tggaacagga tcacacatct
                                                                       60
getecettat tgttaaagat gagaaaacee taggagagaa acettteaaa tgtgatgagt
                                                                      120
geggaaagge etteaggeae aceteeagee tetgeatgea teaaagagte cacacaggag
                                                                      180
agaaacccta taaatgttat gagtgtggga aggcgttcag tcagagttcg agcctctgca
                                                                      240
tccaccagag agtccacact ggagagaaac cctatagatg ttgtggatgt gggaaggcct
                                                                      300
tragtragag ttrgagrott tgratracc agagagtra caraggagag aaacetttra
                                                                      360
aatgtgatga gtgcggaaag gccttcagtc agagtacgag cctctgcatc caccagagag
                                                                      420
tecacacaaa ggagagaaac cateteaaaa tateagttat ataaaacgtt ttgetaagag
                                                                      480
tttaaaatet taaaaceeat aagtgeeaet aggaaggaaa eeetgtátat aeetaeattg
                                                                      540
acccaagaaa tatttacgca atccctagca gaacattgtt tetgaggagg catatgtgag
                                                                      600
attgatttgt tggttcatgc caagtgtgtt ccacaggttg actttgaatg tggacctctg
                                                                      660
agcatccacg caggatggct ctcaggtccc agtcacagac gtcgttttct gggatttcag
                                                                      720
cacgatgeet ccatagitga aagactacae aaaaageeae aateattgee eggeeteetg
                                                                      780
agtcacctic tatctatact ttgcttaaaa gctattcc
                                                                      818
```

```
<210> 3619
<211> 4364
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1682)
<223> similar to gi3327120 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3619
gegeagttag ageegatete eegegeeeeg aggttgetee teteegaggt eteeegegge
                                                                     60.
ccaagttete egegeeega ggteteegeg eeeegaggte teegeggeee gaggteteeg
                                                                    120
ecegeaceat geggetggge agteetggae tgetetteet getetteage ageettegag
                                                                    180
ctgatactca ggagaaggaa gtcagagcga tggtaggcag cgacgtggag ctcagctgcg
                                                                    240
cttgccctga aggaagccgt tttgatttaa atgatgttta cgtatattgg caaaccagtg
                                                                    300
agtogadado cgtggtgaco taccacatoo cacagaacag ctccttggad aacgtggaca
                                                                    360
geogetaceg gaacegagee etgatgteae eggeoggeat getgegggge gaetteteee
                                                                    420
tgcgcttgtt caacgtcacc ccccaggacg agcagaagtt tcactgcctg gtgttgagcc
                                                                    480
aatccctggg attccaggag gttttgagca ttgaggttac actgcatgtg gcagcaaact
                                                                    540
teagegtgee egtegteage geceeceaca geceeteeca ggatgagete acetteacgt
                                                                    600
gtacatccat aaacggctac cccaggccca acgtgtactg gatcaataag acggacaaca
                                                                    660
gectgetgga ccaggetetg cagaatgaca cegtettett gaacatgegg ggettgtatg
                                                                    720
acgtggtcag cgtgctgagg atcgcacgga cccccagcgt gaacattggc tgctgcatag
                                                                    780
agaacgtget tetgeageag aacetgaetg teggeageea gaeaggaaat gaeateggag
                                                                    840
agagagacaa gatcacagag aatccagtca gtaccggcga gaaaaacgcg gccacgtggg
                                                                    900
agcateetgg getgteetgt geetgettgt ggtegtggge ggtggeeata ggetgggtgt
                                                                    960
gcagggaccg atgcctccaa cacagctatg caggtgcctg ggctgtgagt ccggagaçag
                                                                   1020
ageteactgg tgagtttgcc gtgggaagca gcaggttctg gggggcccag gggaggcttg
                                                                   1080
1140
aacaactgtt gttcctggag acgcagcgaa gccctcgatg gtgcgcacgg catttcctgc
                                                                   1200 -
agecteceet tggcatggga tggcateetg gtgtgcaett tgtcacaetg cgatgggatt
                                                                   1260
tteccaacat geacagaage agagagaega gtgetagaee eeegegetee eeagtgeeea
                                                                   1320
geccegacea gggtgtecag ggegggteca ggeaceggeg eccageecee atggggtgte
                                                                   1380
eggagtgggt ceaggeaceg gegeecagee ceegtggggt gtecagggeg ggtecaggea
                                                                   1440
eeggegeeea geeeeegtgg ggtgteeagg gegggteeag geaeeggege eeageeeeea
                                                                   1500
tggggtgtcc ggagtgggtc caggcaccgg cgcccagccc ccgtggggtg tccagggcgg
                                                                   1560
gtccaggcac cggcgcccag cccctgtggg gtgtctggag cgggtccggg caccgccagc
                                                                   1620
ttetetetgt ggeageeact cetgeagete tegtttgece eteagtteea ggageaacat
                                                                   1680
agatgtggat teetgteeaa tttgggaaaa atgteeacae aeggteacee aeetggeagg
                                                                   1740
tgeetetgge tgeaagggge getgggette geaggeagge cageeggget eccegecatg
                                                                   1800
ggccaggate cecteegage cetgtttgcc geccaggaga aggggttecc eggggacagt
                                                                   1860
gggctcaggg tgtgcgcagc caccacgctg tggtgtcacc tgtggaccca ggcgagctga
                                                                   1920
tggccgaccg cagaaacgca cttccaaggc caggtcggcc catccagatg atgcaggaac
                                                                   1980
acagettget aaaaacaegg eeggeetgtt eeegteggag eeagtegaag tteeetgaae
                                                                   2040
aggccgctgt ttccgaagct ttaaaccctg tgtttccacc aagctgagtc ctgagaaaac
                                                                   2100
cggcgtctgc ctgcagaagg gaaaggggtg cttcatgttc ctctctcc ttcatctcc
                                                                   2160
ttecaaggee aegtttgace ggageteace geecagageg tggacaggge tteegtgaga
                                                                   2220
egecacegig agaggecagg tggcagettg ageatggaet eccagaetge aggggageae
                                                                   2280
ttggggcagc ccccagaagg accactgctg gatcccaggg agaacctgct ggcgttggct
                                                                   2340
```

```
gtgatcctgg aatgaggccc tttcaaaagc gtcatccaca ccaaaggcaa atgtccccaa
                                                                     2400
gtgagtgggc tccccgctgt cactgccagt cacccacagg aagggactgg tgatgggctg
                                                                     2460
tetetaceeg gagegtgegg gatteageae caggetette ceagtaceee agaceeaetg
                                                                     2520
tgggtcttcc cgtgggatgc gggatcctga gaccgaaggg tgtttggttt aaaaagaaga
                                                                     2580
etgggegtee getetteeag gaeggegtet gtgetgetgg ggteaegega ggetgtttge
                                                                     2640
aggggacacg gtcacaggag ctcttctgcc ctgaacgctc ccaacctgcc tcccgcccgg
                                                                     2700
aagccacagg acccactcat gtgtgtgccc acaagtgtag ttagccgtcc acaccgagga
                                                                     2760
gcccccagaa gtccccactg ggcttcagtg tcctctgcca cattccctgg gaggaacaat
                                                                     2820
gtccctcggc tgttccggtg aaaagttgag ccacctttgg aagacgcacg ggtggagttt
                                                                     2880
gccagaagaa aggctgtgcc agggccgtgt ttggctacag gggctgccgg ggctcttggc
                                                                     2940
tctgcagcga gaaagacaca gcccagcagg gctggagacg cccatgtcca gcaggcgcag
                                                                     3000
gcctggcaac acggtcccca gagtcctgag cagcagttag gtgcatggag agggtatcac.
                                                                     3060
ctggtggcca cagtccccct tctcacctca gcaatgatcc ccaaagtgag aggtggctcc
                                                                     3120
eceggeeece accacectea geageeecae eceaeteaae eetgagggte eceagggtee
                                                                     3180
tgatgaagac ctccgacccc agcgccaggc tcctcggagc ccaacagtcc caagggggca
                                                                     3240
gtgctgaggg gtacagccct gggccctgac cagccccggc acctgccatg ctggttcccg
                                                                     3300
gaatgaatca gctgctgact gtctccagaa gggctggaaa ggatgctgcc aggtgacccg
                                                                     3360
aggtgcactc gccccaggga gatggagtag acagcctggc ctggccctcg ggacacattg
                                                                     3420
tetgeceegg gactatggge aaatgeeeet eettettaet teecagaate eeetgacatt
                                                                     3480
cccagggtca gccaggacct gttacagccc tggtcacttg gaactgacag ctgtgtgagg
                                                                     3540
cctgcacttc tcagacccag acttagaaca aaaggaggag tgaggactca aggctacaat
                                                                     3600
gaggttccag tacttgttac aagaaattgg ttttctgcaa aaaaagtccc tacctgagcc
                                                                     3660
tttaggtgaa tgtgggatcc actcccgctt ttaacatgaa agcattagaa gatgtgtggt
                                                                     3720
gtttataaaa gaacagttgt catcaccggg cattgattgg cagggacaag gagctgcttg
                                                                     3780
ggtgtggaaa gttggggcgt tggaaagtgg gctgtggtgc ccatttgcag tgactgtgaa
                                                                     3840
gtgactccag gacggacctg cgggggcacc cagaggtcct aagccccagg actgagggtc
                                                                     3900
gtgcatcacc actcgggtgt cccgggaggt gccctgggcc cggggacctc acaggcagga
                                                                     3960
eggegacaet aatgeaggga gagggagtet ggeeceaget ttteetatea gaggegattt
                                                                     4020
teetteacca ggggatggge aggaaagagg caggggeece agaagettet gteeteatg
                                                                     4080
cctgagggca cgggggacac ttggaggctg ctgtcaccac tgtgcgtcca aggccatgct
                                                                     4140
ctctgcgggt cagtgcctga gtctcgcctc cctgctggtc cctgaagccc cctcagaagc
                                                                     4200
cotgootgto acgtoggcat ttgtgagaco taccotgtaa cgcotgococ totcagocoa
                                                                     4260
acatcagett cetettete cettgetgta gacaggetgg attecagtgt tgggacagee
                                                                     4320
atctccacaa acctgactta agagagtaag atgcaaaaaa aaaa
                                                                     4364
```

```
<210> 3620
<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (104)...(335)
<223> similar to gi3219340 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3620
tttcgtgcga ggcccgggca gcatcggcgg cgtggtcaga gcgagtctcg gagaagatgt ggtggcttcc gtttgttggt ggaggaggtg gcaggcctcg gcgggtaacc cagagaacac agccgaagtg gaatgtgggg acgtctgcga caccggggac agagcaactg tggatgaaga 180
```

```
gggctacatc tggttcctgg ggaggagtca tgacactatc aatgcctctg ggtggtgaag 240 gcattgattg tectgacece acagtttctg teccatgaca aggaccaget gactaaggag 300 ctgcagcage atgtaaagte agtgacagee ecatgtattg ggtgttagga atecataata 360 cagtgaacec ataattgact gcaagcatca etttcaaage ateatttcag gatgagaatt 420 taagtgecaa gtgaattcaa ggaacagtge aaaggateca tggeetcagt caccatgaag 480 acceteccaa gagecageee tactgggaac atataaatga gtggagacet ggaatacgaa 540 a
```

```
<210> 3621
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (287)...(771)
<223> similar to gi897849 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3621
tttcgtagca aacaggtttc acgaccactg ctctctggag tcttattcct cagagtatga
                                                                       60
gcccttgacc aaggagcatg gaatgcatca cctatgtttg aacaagggcg ccaqatqacc
                                                                      120
tetgeggace cagggtttgg gaagtgetga tgtggageca caggaettgt tttagggegt
                                                                      180
gtggggcgtg tgtgtgagtg ggcttctgca ggtgggcagc cagcgggcac aqqcqtqqaq
                                                                      240
agcatggtca cccatggaga caccgctcac ggggactttc ctttggcccc acatcccgca
                                                                      300
gggtctcttc ttcgatgatt cctatggctt ctacccaggc caggtgctca ttggccctgc
                                                                      360
caagatette tecagegtee agtggetgte aggtgteaag eeegtgetea geaceaagag
                                                                      420
caagttccga gtggtggtgg aagaggtgca ggttgtagag ttgaaagtta catggattac
                                                                      480
caagagtttc tgtccagggg gcacggacag cgtcagcccc ccacgtctqt catcacccaq
                                                                      540
gaaaacctag gcagggtgaa gcgtctcgga tgctttgacc atgctcagcg gcagcttggg
                                                                      600
gagegetgte tgtatgtett eccagedaag gtagagedag ccaagattge etgggaatgt
                                                                      660
ccagaaaaaa actgcgccca gggggagggc tctatggcca agaaggtgaa gcgcctgttg
                                                                      720
aagaagcagg ttgtgcggat catgtcatgc tccccagaca cccagtgttc ccgggaccat
                                                                      780
tccatggaag acccagac
                                                                      798
```

```
<210> 3622
<211> 1708
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1709)...(510)
<223> similar to gi434779 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3622
ttaaaagtca cactagataa gacatcttta ttacttaatc tttaaaacag gtcactgtgc
                                                                       60
ctattcaatt ctgaaactgt ttgttttctt tccctccccc gcactcccgc tctgatacac
                                                                      120
aaacttgttg taaaaataat gcagaaacat atacgtcaat ctaagtctct gaaatatggc
                                                                      180
caactctacc tcgccgtata tccaacatta aaaagaaaaa aaaaggctgt ttaagaatag
                                                                      240
aactcattcc cggtttccac caaattattt ccctaattct taaatcctca aataagttct
                                                                      300
taatctccaa agtctcggtt gtgggaaaaa cattaatttg tgcagtccaa cacttacata
                                                                      360
ctttcttgac ggaagggcaa tcctgtccct ttaaactcaa tgaaggcagc ggccaggtcc
                                                                      420
ttctgagtcc ccgtataatt gcctagaact taacatttag tattcatagt ccttggttta
                                                                      480
cagacgggtc cgacagttag aaactattac ttcctcctct ttcctcctgg gcgctgtcct
                                                                      540
ectitictet igecacecaa gecaggegge ceagaattea teitgeetee caageeeeet
                                                                      600
tteetettee eteeetgget gggegggeee eettteetet tgeeeeeagg eecetgeegg
                                                                      660
cotcoottto tottgocott otggotoatt ttootcotot tggoggootc otcotggtoo
                                                                      720
tecteectea tetgettatt ggtggeecta gteacateca gettgagget tettgetgtt
                                                                      780
catgacacga agcageteca actggttett tttetegget geaaagteee egaaaagggg
                                                                      840
ttgaaacttc cttttcttgc cggagccccg gggcaccttc tccttgggga ggcgctcctg
                                                                      900
aaagcgcccc acagaggcgg tggagacctt ggccacttgc atggcgcggc ccagctcctc
                                                                      960
cttactctgg tgtccggtag ggtgcaagcc ggccgcgctg ggcagctgca tcttgtgcgc
                                                                     1020
gegggeeagg tracgeagee ggtreagete gtrettggee accettreet tertggeetg
                                                                     1080
aatccgcttg gcgaactggt cctccaaggg gtcggcattg ccgggcacct caatcagcca
                                                                     1140
ttetttggtg tegteceggg egegetggta geceeagege egeegeeact ggecacteae
                                                                     1200
ctcgtcccac accaggttgg tettettett gggacggatg cccttgagge gegegaactg
                                                                     1260
ctgccagcgt gtaagtggcc cgcggtcggg gcagaggctt ctctcgcggc aggcgtgtgg
                                                                     1320
tgggctccgg cagccgcgcc actatcgcct cttccacgcg ctccgtgggc agctgccaca
                                                                     1380
gctggttgat gagcagttgc gtgttgtccc gcgccagggc ctgtagctcg gcctccggcg
                                                                     1440
tgggteegge geacegeage eeggtegggg ggtteeggte egaegeeage aggttgeeea
                                                                     1500
ggtcaaactg cagctccagc tecttgtgca cegtgatgeg ttgcaacttc tetgeetegt
                                                                     1560
cetgetetge etttgegage ageteeteea egetetggee etecatgget eeggetegge
                                                                     1620
tcactcgctt tggggctgca gctgaagtta cttttcctac agtggcggcc caaactccgg
                                                                     1680
cagcataacc acgtgcagat gccgggat
                                                                     1708
```

```
<400> 3623
aaccggatgc tgtagctcac ggacaccccc cccccaaga cacatatgat ccaccattcc 60
atctctgact ataaggccac cctgaggtgc tgggccctgg gcttctaccc tatggagatc 120
acactgacct ggcagcagga tgaagaggac cagactcggg acatggagct tgtagagacc 180
aggcctgcag gggatggaac cttccagaag tgggcagctg tggtggtgcc ttctggagag 240
```

```
gaacagatac atgtgccatg tgcagcatga ggggttgccc gagcccctca ccctgagatg
                                                                      300
ggagcagtet teteageeca ceateceeat egtgggtate gttgetggee tggtteteet
                                                                      360
tggagctgta gtcactggag ctgtggtttc tgctgtgatg tgcaggaaga agaactcaga
                                                                      420
tagagtgage tactetgaag etgeaageag egaceatgeg eagggttetg atgtgtetet
                                                                      480
cacggettgt aaagtgtgag acagetgeet tgtgtgggae tgagaggeaa gatttgttea
                                                                      540
cgccttccct ttgtgacttc aaaaaccctg actctctttc tgcaaaggca cctgaatgtg
                                                                      600
cctgtgttcc tgtaggcata atatgaggag gtggggagac caacccaccc ccatgtccac
                                                                      660
catgaccete treceteatg etgacetgtg trecetetee aataattaat catteetget
                                                                      720
ccatagacgt gaggctgaga tgtctccatc tctgtctcaa ctttatgtgc actgagctgt
                                                                      780
aacttcttac ttccctatta aaattagaat ctgagtataa aaaaaaaa
                                                                      828
```

```
<210> 3624
<211> 4530
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(2018)
<223> similar to gi307121 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3624 tttcgtgaca gtagcccctg ctcggccttc gagttccact gcctaagtgg cgagtgcatc 60 cactccagct ggcgctgtga tggtggcccc gactgcaagg acaaatctga cgaggaaaac 120 tgcgctgtgg ccacctgtcg ccctgacgaa ttccagtgct ctgatggaaa ctgcatccat 180 ggcagccggc agtgtgaccg ggaatatgac tgcaaggaca tgagcgatga agttggctgc 240 gttaatgtga cactetgega gggacecaac aagtteaagt gteacagegg egaatgeate 300 accetggaca aagtetgeaa catggetaga gaetgeeggg actggteaga tgaacceate 360 aaagagtgcg ggaccaacga atgettggac aacaacggcg getgtteeca egtetgcaat 420 gaccttaaga teggetaega gtgeetgtge eeegaegget teeagetggt ggeecagega 480 agatgcgaag atatcgatga gtgtcaggat cccgacacct gcagccagct ctgcgtgaac 540 ctggagggtg gctacaagtg ccagtgtgag gaaggcttcc agctggaccc ccacacgaag 600 geetgeaagg etgtgggete categeetae etettettea ecaaceggea egaggteagg 660 aagatgacgc tggaccggag cgagtacacc agcctcatcc ccaacctgag gaacgtggtc 720 gctctggaca cggaggtggc cagcaataga atctactggt ctgacctgtc ccagagaatg 780 atctgcagca cccagcttga cagagcccac ggcgtctctt cctatgacac cgtcatcagc 840 agagacatec aggececega egggetgget gtggaetgga tecacageaa catetactgg 900 accgactetg teetgggeae tgtetetgtt geggatacea agggegtgaa gaggaaaaeg 960 ttattcaggg agaacggctc caagccaagg gccatcgtgg tggatcctgt tcatggcttc 1020 atgtactgga ctgactgggg aactcccgcc aagatcaaga aagggggcct gaatggtgtg 1080 gacatetact egetggtgae tgaaaacatt cagtggeeca atggeateae eetagatete 1140 ctcagtggcc gcctctactg ggttgactcc aaacttcact ccatctcaag catcgatgtc 1200 aatgggggca accggaagac catcttggag gatgaaaaga ggctggccca cccttctcc 1260 ttggccgtct ttgaggacaa agtattttgg acagatatca tcaacgaagc cattttcagt 1320 gccaaccgcc tcacaggttc cgatgtcaac ttgttggctg aaaacctact gtccccagag 1380 gatatggtcc tcttccacaa cctcacccag ccaagaggag tgaactggtg tgagaggacc 1440 accetgagea atggeggetg ceagtatetg tgeeteeetg eeeegeagat caacceceae 1500 tegeceaagt ttacetgege etgeceggae ggeatgetge tggceaggga catgaggage 1560 tgcctcacag agggttgagg ctgcagtggc cacccaggag acatccaccg tcaggctaaa 1620

	ggtcagctcc	acagccgtaa	ggacacagca	cacaaccacc	cggcctgttc	ccgacacctc	1680
	ccggctgcct	ggggccaccc	ctgggctcac	cacggtggag	atagtgacaa	tgtctcacca	1740
	agetetggge	gacgttgctg	gcaagaggaa	attgagaaga	agcccagtag	cgtgagggct	1800
	ctgtccattg	tcctccccat	cgttgctcct	cgtcttcctt	tgcctggggg	tcttccttct	1860
	atggaagaac	tggcggctta	agaacatcaa	cagcatcaac	tttgacaacc	ccgtctatca	1920
	gaagaccaca	gaggatgagg	tgcacatttg	ccacaaccag	gacggctaca	gctacccctc	1980
	gagacagatg	gtcagtctgg	aggatgacgt	ggcgtgaaca	tctgcctgga	gtcccgtccc	2040
	tgcccagaac	ccttcctgag	acctcgccgg	ccttgtttta	ttcaaagaca	gagaagacca	2100
	aagcattgcc	tgccagagct	ttgttttata	tatttattca	tctgggaggc	agaacaggct	2160
	tcggacagtg	cccatgcaat	ggcttgggtt	gggattttgg	tttcttcctt	tcctcgtgaa	2220
	ggataagaga	aacaggcccg	gggggaccag	gatgacacct	ccatttctct	ccaggaagtt	2280
	ttgagtttct	ctccaccgtg	acacaatcct	caaacatgga	agatgaaagg	gcaggggatg	2340
	tcaggcccag	agaagcaagt	ggctttcaac	acacaacagc	agatggcacc	aacgggaccc	2400
	cctggccctg	cctcatccac	caatctctaa	gccaaacccc	taaactcagg	agtcaacgtg	2460
	tttacctctt	ctatgcaagc	cttgctagac	agccaggtta	gcctttgccc	tgtcaccccc	2520
	gaatcatgac	ccacccagtg	tctttcgagg	tgggtttgta	ccttccttaa	gccaggaaag	2580
	ggattcatgg	cgtcggaaat	gatctggctg	aatccgtggt	ggcaccgaga	ccaaactcat	2640
	tcaccaaatg	atgccacttc	ccagaggcag	agcctgagtc	actggtcacc	cttaatattt	2700
	attaagtgcc	tgagacaccc	ggttaccttg	gccgtgagga	cacgtggcct	gcacccaggt	2760
	gtggctgtca	ggacaccagc	ctggtgccca	tectecegae	ccctacccac	ttccattccc	2820
			cagttcagag				2880
	tattattttg	cactgttttc	tgtcgtgtgt	gttgggatgg	gatcccaggc	cagggaaagc	2940
٠	ccgtgtcaat	gaatgccggg	gacagagagg	ggcaggttga	ccgggacttc	aaagccgtga	3000
	tcgtgaatat	cgagaactgc	cattgtcgtc	tttatgtccg	cccacctagt	gcttccactt	3060
	ctatgcaaat	gcctccaagc	cattcacttc	cccaatcttg	tcgttgatgg	gtatgtgttt	3120
	aaaacatgca	cggtgaggcc	gggcgcagtg	gctcacgcct	gtaatcccag	cactttggga	3180
	ggccgaggcg	ggtggatcat	gaggtcagga	gatcgagacc	atcctggcta	acaaggtgaa	3240
	accccgtctc	tactaaaaat	acaaaaaatt	agccgggcgt	ggtggcgggc	acctgtagtc	3300
	ccagctactc	gggaggctga	ggcaggagaa	tggtgtgaac	ccgggaagcg	gagcttgcag	3360
	tgagccgaga	ttgcgccact	gcagtccgca	gtctggcctg	ggcgacagag	cgagactccg	3420
	tctcaaaaaa	aaaaaccaaa	aaaaaccctt	gcttggggca	tcagcagccc	ttggcctctg	3480
	gccaggcatg	gcgaggctga	ggtgggagga	tggtttgagc	tcaggcattt	gaggctgtcg	3540
			gctttccagc				3600
			acaggtgcct				3660
			caggagttgg				3720
	catctctaca	aaaaccaaaa	agttaaaaat	cagctgggta	cggtggcacg	tgcctgtgat	3780
	cccagctact	tgggaggctg	aggcaggagg	atcgcctgag	cccaggaggt	ggaggttgca	3840
	gtgagccatg	atcgagccac	tgcactccag	cctgggcaac	agatgaagac	cctatttcag	3900
	aaatacaact	ataaaaaaat	aaataaatcc	tccagtctgg	atcgtttgac	gggacttcag	3960
	gttctttctg	aaatcgccgt	gttactgttg	cactgatgtc	cggagagaca	gtgacagcct	4020
	ccgtcagact	cccgcgtgaa	gatgtcacaa	gggattggca	attgtcccca	gggacaaaac	4080
	actgtgtccc	ccccagtgca	gggaaccgtg	ataagccttt	ctggtttcgg	agcacgtaaa	4140
			ggggattttt				4200
			atatatatat				4260
	tttgcaaacc	ctggttgctg	tatttgttca	gtgactattc	tcggggccct	gtgtaggggg	4320
•	ttattgcctc	tgaaatgcct	cttctttatg	tacaaagatt	atttgcacga	actggactgt	4380
	gtgcaacgct	ttttgggaga	atgatgtccc	cgttgtatgt	atgagtggct	tctgggagat	4440
•	gggtgtcact	ttttaaacca	ctgtatagaa	ggtttttgta	gcctgaatgt	cttactgtga	4500
	tcaattaaat _.	ttcttaaatg	aaccaaaaaa				4530
		*			•		

<210> 3625 <211> 2343 <212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2344)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2090)...(1160)
<223> similar to gi3820985 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3625
ttttttttt ttatgtggat aatatttatt tgtatcttat ctatagaaca aatatttaca
                                                                       60
gatacaaacg gaatcacagc aaagttgcta taaaaccatc cagacctctc gatggccact
                                                                      120
tctgaaaaca tccacggtga agggcagggc caggcctggc tgtggagtgg gccagctgag
                                                                      180
tacctgggcg tcagccaagg gaaatggttg gggattatgg cttcagcact ctgccggagc
                                                                      240
acattectga gegetgacaa egtggageee teacegeeee cacetaceee aaceteaatg
                                                                      300
gggaaggaaa ggggcctgag ctggccaggg ctgcccgggc tcactatgtg cctgctccag
                                                                      360
gagteeetgg eeeetgtget ggeaggagea teeetgaget ggaeegggag geetetetgg
                                                                      420
cetggggetg etecetgece ggeaggetge tgtttggeag etggaggtgg eaagagetge
                                                                      480
tggtgctgcc agggcgtgtt ggccaggaat gagctcccag ggcagccctg aggaaagggt
                                                                      540
cttaggaagc gcctcccagc tcactactag gagctgggga ctgtcagtgc tgagtggggc
                                                                      600
tggggtacag gagcacctgc ctctcctttc tttggcttag aagtggggaa ggaagggcca
                                                                      660
ggaaaaggga ccaaagccgc cccagccttg gcccctaggc cgcctgggga ctgtgtgtgt
                                                                      720
gctgaggggg cagtgggagg tgggcagctc tggagttccc tgcaccctgg gatccttggg
                                                                      7.80
ctgctctcac tcccggggtc ccagcagggc aaggcctctg cttgggacca gtgctgctct
                                                                      840
tectegetge ttactecagg aggtgaaggt gacagggegg caaggagagg taaccacage
                                                                      900
atggctgggg acaggcgcta cactgggccc cggacccagc acagggatca cagtgtcggt
                                                                      960
ctegegeaca cacetetgge cacatgtgea caceacatae atecacaege acetecetee
                                                                     1020
tgtctggcgg gaggctcatt ctctctcgca gccactcgcc ctctctgcct ctcacatatg
                                                                     1080
cggtcacaga gtgaatccga gcatcttatt gctgcagggg gcaggggcgt cggcatcagg
                                                                     1140
gaaagttaat ccacgaagag cgagaacagc accattacca cgatgcccgc acagagcaga
                                                                     1200
agcagetget geagggageg ceaegggtee tettetteea agaggteagg gageaegtte
                                                                     1260
accaaggega tgtagagaaa geegeeagag gtgaagggea ggaeeeagge tgeegtetee
                                                                     1320
tctactccct tgggggactg ggtacagatg gcgaagccag cgcccagtag gccccccagc
                                                                     1380
gctgttgaga gttgcagctt ggctgcgctc catcggtcaa agccggcccg gagcaggatg
                                                                     1440
gcaaagtcgc ccacctcatg ggggatctca tgcaggagga tggccatggt tgtcaggagc
                                                                     1500
ccgatcttct tgctcacaag gaagctggca gccacagcca gcccgtgggt gaagttatcg
                                                                     1560
atggtgttgg ccagcaggtt gaggtagccg ctgactttga tgctccggac cacggcaccg
                                                                     1620
aggccgggct ctgcagccgg ctgggccaga cagtggcctc cattgagcgc ggcggcagca
                                                                     1680
gcagtggggt ctttgttggg ggcctggctg gtcccctcct ccttgctgtc caggaacatc
                                                                     1740
ttctccaacg ccaggaaggt caggatgcca gcaatgaccc acagccccag ctgttgctgc
                                                                     1800
tgctgcaggc tctgcccctc accaccaggg ctggcgctgc acgtgtaggc ccaggcttcg
                                                                     1860
ggcagcagat gcagaaacac attgcccaag agtcccccca gggcgaagct gagcagctgc
                                                                     1920
ttcaggcgcc aggccccagc ttctgagcgc agcatggtcc ccatctctag gggaatgaca
                                                                     1980
agcaacggga agaccccact gagccccacc atgagggaac ccaggaggga gcagatccag
                                                                     2040
gtgtccagcc gctctccgct cagcagagcc ccccaggact cgctttcctt gttgtccagg
                                                                     2100
cgacaggeeg tegeagteec ceggeteegg agggeegget gggaaceece agecetteee
                                                                     2160
aagageteea gggcaaggge agtgaggaag aggageettg ggeeegeeat geeacageea
                                                                     2220
gggcagggac atccaggcat gccacgtacg tgcggcggcg gcggcggcga tccgggcggc
                                                                     2280
cccagcccgg gaattcggtn ncggtcgtcg tgcgtacggc ttcaatnatc aaanngnggc
                                                                     2340
                                                                     2343
```

```
<210> 3626
<211> 1325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (249)...(465)
<223> similar to gi2564001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3626
gggaaagtga gtgctggcca ggctggggcg gacagaacac ttcgacgggc tccggagccc
                                                                       60
agattcagec aggaacccac aggcaactcg gectaecccc agetgaggec etttttggae
                                                                      120
ccgcagggga gagatettaa acccagcget ttggtcccac ccacccgetc ccacactggg
                                                                      180
aggagaccat ggctccacac acageceetg ccaggeceae aggggeggge atgggggeee
                                                                      240
acctgeetee tgeatgtgtg gaeagggtee tggagagtga ggagggeege agggagtace
                                                                      300
tggcgtttcc caccagcaag agctcgggcc agaaggggcg gaaggagctg ctgaagggca
                                                                      360
acggccggcg catcgactac atgctgcatg cagaggaggg gctgtgccca gactggaagg
                                                                      420
degaggtgga agaatteagt tttateacce agetgteegg cetgaeggae cacetgeeag
                                                                      480
tagccatgcg actgatggtg tcttcggggg aggaggaggc atagaccgtc cggagcagtg
                                                                      540
gggcctctgc cagcccttgc agctgcagcc catccctggg ccatgtcccc tccatcgagt
                                                                      600
gcccggtgct tgggggagga gggcagggac agggagggag ccacagtcag tgcccgggaa
                                                                      660
cctggaaget gcgctgctct gcgcctctgg gcctcactgt ggacagagga gtcaggcccg
                                                                      720
ccccaggage etecagetge ctaaccagtg ccattettte acaacacgat tttetacaaa
                                                                      780
totadageac aacegagttt gtaaccegtg ggttagtatg aggacegggt tegtgtacte
                                                                      840
totgtatete etettaaget tegteeaggg ttetttattt ttgtetgetg ceaatgtegt
                                                                      900
ctegeatgee tgeacceteg catgeaeget geegeatge caegtgeeae getgtageea
                                                                      960
cagacccctt gctcgggcct cacccaaggc caaactccaa acacaatcag aaccagccaa
                                                                     1020
agaagcactt cetgggcacg gccaccaget etccegeete cagtgtggge eggeteetge
                                                                     1080
agggtccgag ggctgcatct ctaccagcca gcccagggct cttcccaggg tctcgcattc
                                                                     1140
aagggcaatt acattttaaa aagaaaaaca gaaaaaggtt aatcacaaaa ccaaccctca
                                                                     1200
cttcacaggg tctgtaagtc actcatagaa ctttgctctt cccgagacag ggtcccttcc
                                                                     1260
ccageteagg caeaacagag tetggeagge tetggeacce tgggeeteet eegggageet
                                                                     1320
cccat.
                                                                     1325
```

```
<210> 3627
<211> 1458
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1424)...(490)
<223> similar to gi3881305 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3627
ttttttttt ttcaggctta aataacaaaa tatatttcag atatgcacag ttttaactga
                                                                       60
ggactacaca agcettecte gggetgeagg ecegeegeee teecagtggg atteacagee
                                                                      120
cctgcggagt ttgtcctcac gcacaccaca cacgatcggg tataaaacac attctataaa
                                                                      180
cacgttetga tgcaaactgt gtgtecataa atatatattt atgcaagtte etecaceca
                                                                      240
ctgcagggcc gtacagctct ggggacagga ggtcacagcc gactttaaac cacaggttaa
                                                                      300
gtagaaggtt gcaggtcaaa tagaagttcc cgtgtgattg catcacccaa cggcactgtt
                                                                      360
ctgtcatcag gaaatgctga gtgcccgccg tggccgggtg ggcgcgggcg gtggtcagac
                                                                      420
gctgctctgg agctggctat ctgtggcact gtcaggggct gaggactggc tgggcagaca
                                                                      480
agtttccagg ccatctgaag actccgacag gggcttgtat aagaagcagg ctatggcaaa
                                                                      540
gaagaggacg cccagcacct tgtacaggag ccccatgatg agtatgtagc ggctcatggc
                                                                      600
cgaattctgg tacaccaagc aggagccctg ctggccacac tggtcctgcc acagcagaca
                                                                      660
ggccttgtcg atcacccagc cgaaggcgat gggccccggg atgcccccta gtattctaac
                                                                      720
tacaatccac tggattccca gggcaaagga tctctgaggg tcacggacac atcgtagagt
                                                                      780
tgccgttagt gcaggaatgc tgctgaggaa tgtaaagaaa attacaacga atatgaaaac
                                                                      840
cagaaggagg ggctttctct gacaagttga agtgcatttc cctgcagtgg catggccaaa
                                                                      900
accagaggaa agattetgag ggatacaget acagtetegg tacacetggg aageecaaca
                                                                      960
atageteega ttacaagggg aaggeaeggg ggeeeettee eagggteeag gggaggaeag
                                                                     1020
gggcggtagg cagcggctcc actcaccttc tggccgtcca cattcgtctc cgtggctgca
                                                                     1080
gggcaccctg cgtggcacag tgagaagtac atgaggccgt ccgagccgca cacagggctg
                                                                     1140
tagtgttetg getggeaget geaggeageg ttgeagggag eegttaggtt eaggtggeet
                                                                     1200
tegggeagga ggeteeegee gtagetgget gtgaegeegg ceatgggeae aetggggeag
                                                                     1260
tgcagtgaga agacgaggat gcccagcagg ctgacaacgg tgcagaacag gcagaacttg
                                                                     1320
atgaccgcgg agccccggag cctgagcttg ttcacaaaga agccgcccag gaaggtgccg
                                                                     1380
ccaccacceg ctggcaccac caggtaccca aacaaggtgg cagcttctga ggcactcagg
                                                                     1440
cgaattccac cacacgga
                                                                     1458
```

```
<210> 3628
<211> 910
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (730)...(242)
<223> similar to gi755646 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3628

ttttttttt ttttt tttcccagctc acacatcttt attggcctgg atgtggggtt gccaaaccag 60

ttgcccctgt cctgtgtcag ccagctgtgg caatttcacc cttattcctt ggagaggcca 120
gctgcctgct ggaaggagtc agaagtcggt ggatgtcatt gaggccttgg aggccccagt 180
ctggcgggag agaaatccac acctgtgcct ggagttctcc ttccctgacc ctctgaaccg 240
gcgcttaaaa tgctgtcccg cctggaacag ggaggccaca tccagcagtg cgtcctcaat 300
gtgctgcccc agcctgtgg aatccgtttt tgtgcttgat tttttgctgg agatgtggaa 360
```

```
ggtgatcatg ccatccccca tgaagatata agaaacacca taaccatggt catcagcagg
                                                                      420
cccgaatcca ccgcctgagg aaacatagtc cgggtaattg tggacgtcaa acagatgcat
                                                                      480
ttgctgaaca gggatctggc tggtggacag ctgccactgc tccgaatgga cctgggtcag
                                                                      540
gaagggcgac tgcaggtgga ggaatcggga cacgatgtac agcgcaaaca ggtggcggtc
                                                                      600
aactccctgc ccgctcatgg ctgccttcag cagagcctgg tgcttgtcca ctgccacgcg
                                                                      660
gaacagggcg aggcactgtg ggtcctgcag tccccaggga ggtcacaggt catggaaaga
                                                                      720
caggaagtcg acttagggct gggcctgcgg cacatctggc ctcaactgag tttgccacat
                                                                      780
ccctgcaagg tgggaatatc aaccccattt tacagatggg gaactgaggc ttagagaggg
                                                                      840
gaaatcattt ggccaggttc acacagccag ggagagccag gcgggttcct aggtgtgtct
                                                                      900
ggccccagag
                                                                      910
```

```
<210> 3629
<211> 2127
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(1106)
<223> similar to gi2088669 in the genepept database release 114
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3629
gcagccccgg caggcggcgg ccccgacccg gaggccttat cggccttccc cggacggcac
                                                                       60
ctgagtgggc tgagctggcc acaggtgaag cgactggacg ctcttctgag cgagccgatt
                                                                      120
cccattcacg ggcgcggcaa cttccccacg ctgagcgtgc agccccggca gattcgtgca
                                                                      180
ggtggtccgc agcaccctgg aggagcaggg actacatgtg cacagagtgc ggctgcatgg
                                                                      240
ttcagctgcc agccacgtgc tgcaccctga gagtggactg ggctacaagg atctggacct
                                                                      300
ggtgttccgg atggacctgc gcagtgaggc atccttccag ctgaccaagg cagtggtgct
                                                                      360
ggcctgccta ctagacttcc tgccggccgg tgtgagccgg gccaagatca cgccactgac
                                                                      420
actcaaggag gcatacgtgc agaagctggt gaaagtgtgc acagactcgg accgctggag
                                                                      480
cctcatctca ctgtccaaca agagcggcaa gaacgtggag ctcaagtttg tggactcggt
                                                                      540
gagacgccag titgaatica gcatagactc citccagatc atcctggact ccctgttgct
                                                                      600
ctttggccag tgctcgtcca ctcccatgtc tgaggccttc cacccaacgg tcacaggcga
                                                                      660
aagcctgtac ggggacttca ccgaggccct ggagcacctg cggcaccgtg tcatcgccac
                                                                      720
gcgcagtccc gaggagatcc gaggtggtgg cctcctcaag tactgccacc tcctggtgcg
                                                                      780
gggcttccgg ccccggccca gcaccgatgt gcgcgccctg cagcgctaca tgtgctcccg
                                                                      840
cttcttcatc gactttccag acctggtgga gcagcggcgc accctagagc gctacctgga
                                                                      900
ggcccacttc ggtggggcag atgcagcccg ccgttacgcc tgcctggtga cactgcaccg
                                                                      960
ggtggtcaac gagagcaccg tgtgcctcat gaaccacgag cgccgccaga cgctggacct
                                                                     1020
cattgccgca ctggcgctgc aggcactggc tgagcagggc ccagctgcca ctgccgccct
                                                                     1080
ggcctggcgc cctccaggca ctgacggggt tgtgccagcc actgtcaatt actacgtgac
                                                                     1140
eccegtgeaa ceteteetgg etcaegeeta teccaeetgg etgeettgta actgaeteag
                                                                     1200
accetggeea gaagggaagg gaetgggeet caeggggtgg ggtggggeet ceaagagtgt
                                                                     1260
gtggaggaca tgaccagagg cgcagaatgt gccaggaggc ccagcactgc agggttgggc
                                                                     1320
ctttgattga acagaccaga ctttcccgag cacgaggccc ctgtgggctt aatgccagcc
                                                                     1380
tggggctctc agcaggagga ccctttggtt attgcatcac acttttggac cagcatgccg
                                                                     1440
gtggggtgca ggcgccattt gtcttggaag tcaatttcct tcaggagaca aagcaagttt
                                                                     1500
ggggtggtag cettaatgce cagcacettg gattgattee catggtetaa gagggtettt
                                                                     1560
ttgactaagg ccagcctgtg gtgatcccag cagctttgga gggcctgcag cccacacact
                                                                     1620
```

```
gactgataca tggtatgtta cagggacttg tcactttgga tcaggctggg ccactacagg
                                                             1680
gcctgatggg ccaacttggg taatcactgg gaggagggaa actgaggccc gaggcagata
                                                             1740
cctgggtttg gggagggctg ggtttagccc ggttctctga actacatacc cccagctgtg
                                                             1800
aagcetteet ettgaggggt tgaggtggge agtatacagg agceaagcag eecagggtgg
                                                             1860
                                                             1920
gtcgcagccc aggccccttc cagggtgcca ctcctttccc ccttgtgttg caaggagccc
1980
acgttcccac cccactggct tggttacagg gctctcacat ggggtagggg agccatactc
                                                             2040
ccacccctt gcgtattccc ctgggtttgt tgatattttg cactcttaac acctgccaat
                                                             2100
aaagacggtc tacactgaaa aaaaaaa
                                                             2127
```

```
<210> 3630
<211> 1667
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1669)...(962)
<223> similar to gi3046604 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3630 ttttttttt ttctatgtac aaaaacattt taattgaaat acctgtataa aaaaatatga 60 tetecagaca teteaetttt gaactgaaag aacceecate tgegatgeet geacacaceg 120 cattcacaca aacacaggta ctgaataaat taaacgctca ggctctggcc ccaccccagc 180 tttcagagcc cacaagcaga ctgtacaaag tcaataattt aaaacccaaa ccctgggcac 240 agtgcctgga agtgtcaggg tcacccactc cccttaagtt agccactata catgttcatc 300 ttctgacagg cggggccagg acagacgcca ggcacaggaa tcagggcctg gggtccctgg 360 accacageca eccectecee tgeeteceea etgteeeetg gggettggga gaggeagaet 420 gctcagagga aataacctca acaaataaat taaacaataa atagccccgg tgggccgagg 480 gcacctccag ggggtcacac cataaataac agagttggcg gcgggtacgg ctcgcgtggg 540 cgggcgggcg cggaggccag gacttgcatt gtgtgtgcag gacgtgccca gacgcacacc 600 gcaggactga gggcgggagg tgggcttggg accctgcgcc ggcggaaaga gctccgggtg 660 ggcaggcaga tgggaaggcc gcctccggac acagcagcac agaggggcgt ctggggttca 720 agtatccacc cagggcaggc gggacctcga ccggagcgtc tttggacaga cagagcttga 780 gaaaaccaag teeegeggga ceagegttea aaaggeacte aaagegaagg teaceagggg 840 tcagaggtca ctgcttccgc aggaggagac ggcccacgca ggaaaaagtc agggtctggg 900 ggcgtcccag gtctggccaa ggcaggtggt cccctagctc ccagtcaggt gcagctcctc 960 acaagetete getgetggae gtggtgetgg ceaegteate agggtegagg gtgeaeagee 1020 gcaggtcaca gctctccggg gcgcccccgt cagcccccag catccaggga tgggccgcaa 1080 tetgatecag egaeggeege tetgagggee geagggaeag geaecaeegg ateagetget 1140 ggcactetgg agagaceete eteeggaaga geaggeggee teggaggate teetegteet 1200 gctcgaaggg gatgtcccca cacaccatat cgtagagaag cacgcccagc gaccacacgg 1260 tggccgagcg cccgtggtag cggtggtagc ggatccactc cggggggctg tacactcggg 1320 tgccgtcgaa gtcggtgtag accgtgtcct tgagcagcgc acccgaaccg aagtcgatga 1380 gettgagete teeggagege aggteeacáa geagatttte gteettaatg tegeggtgea 1440 cgaccccgca gctgtggcag tggcgcacgg cggccagcac ctgcgcgaag aaagcggcgc 1500 gccagcggct cgtccagggc gccgcgctcc gtgataaagt cgaagatggt cctagcgccg 1560 getegggeeg etecageace ageaggaage egtegggeeg etegaaceag tecageagge 1620 ggatgacgcc gcgcgcgcg cccggcgcgc ccaccttgcg cagcagc 1667

```
<210> 3631
<211> 1468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1468)...(1055)
<223> similar to gi1899194 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3631
ttttgttttt tttttttag aagcaaataa acattttatt tccacagcac gccttccctt
                                                                       60
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<213> Homo sapiens
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<221> misc_feature
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<212> DNA
<213> Homo sapiens

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     <222> (23)...(585)
     <223> similar to gi2058378 in the genepept database release 114,
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ggggtcagac tgtgtagacc agttccgggc catgcaggaa tgcatgcaga aatacccaga
                                                                    420
cctctatccc caagaggatg aggatgagga agaggaaaga gagaagaagc cagcagaaca
                                                                    480
agcagaagaa acagctccca ttgaggccac tgcaaccaaa gaagaggagg gatcaagtta
                                                                    540
atgaaggcca caaggcactg ggcaccagtc cttttggagt ggaccttttg caaaaggcct
                                                                    600
tgtcatcacc ttccaagaaa gtttccttct gttgtcctgt gcattataat atacaaaata
                                                                    660
acttattttg atgatcagag gtcttgaggt cttgacctct tgacatatac actg
                                                                    714
     <210> 3635
     <211> 1258
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (42)...(287)
     <223> similar to gil872200 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 3635
atggaaaact gtgcaactgc aggtaccacc cacgagtccg cgatcttggc tcaccgcaac
                                                                    60
ctccgccttc tggattccag caattctgcc tcagcctccc gagtagctgg gactgcaggc
                                                                    120
gegtgecace acacceggtt aattititgt attititggt agatacgggg titegecatg
                                                                    180
teggecagge tggtetegaa eteetgaeet egtgatetge etgeeteage eteecaaagt
                                                                   240
gctgggatta caggcttgag ctcctgcgcc cagcccatgc taagtctttt acccagtggt
                                                                   300
caaaactggc acaacacagg atttatactg gagagcaacc tcacaaatgt aatgaaagtg
                                                                   360
gtaaggettt ttatcaaatg teettgtett tggggteatg agaaaattea tacagaatet
                                                                   420
480
gttttttaaa tgaactccca taagagtcta cacaccatag aactcatacc aggaatcaca
                                                                   540
aagtototaa atttocaaag ttaactggaa atattacaaa ctgcagaata attccaggoo
```

<212> DNA

aaaatatgtt aaattcataa catgatgtat atcaaaggaa aaaaggacat gtggaaatga

cacattatct tcagtgtata aaatattcat ttatgtgaag tttcttggaa aggctacact

600

660

```
actattactg gtttccgtct gatgtttgag atctgttgat tttatgcttt tcttacaggc
                                                       780
ctttcattat gatctttggg aaggaatcaa taaaatgata gggcctactt cattaggtgt
                                                       840
ggttcattcc tattcatgct ccctggaaga acaagaatgc tgaattttga aatttaatat
                                                       900
tgtatgaatt agcatcaggg agaggtggag aaaaatacaa aactaaaagt catgcttatt
                                                       960
gtgttcagtg tgcccttctc cagagggcca ctggcttata ggaaaggatt gctgctctac
                                                       1020
cagttgacca ggagatggca cgccaggaca ttaagacact ggagttttgt ttcgttttt
                                                       1080
1140
atgtgcacgt atacacagac gtttcacaac tggcattatg ttttgctact gttttattta
                                                      1200
1258
```

```
<210> 3636
<211> 2549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1864)
<223> similar to gi4731910 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3636 atggatgate ageaagettt gaacteaate atgeaagatt tggetgteet teataaggee 60 agtegaccag cattateett geaggaaace agaaaageaa aatetteate accaaaaaa 120 cagaatgatg teegagteaa atttgaaeat agaggagaaa aaagaateet teagtteeee 180 agaccagtta aactggaaga totgagatot aaagctaaaa ttgcctttgg acagtctatg 240 gatctacatt ataccaataa cgagttggta attccattaa ctactcaaga tgacttggac 300 aaagetetgg aactgetgga tegtagtatt catatgaaga geeteaagat attaettgta 360 ataaatggaa gtacacaggc tactaattta gaaccattgc catcactaga agatttggat 420 aatacagtat ttggagcaga gaggaaaaaa cggctatcta taataggtcc tactagtaga 480 gatagaagtt ctcctccccc gggttacatt ccagatgaat tacaccaggt tgcccggaat 540 gggtcattca ctagtatcaa cagtgaagga gagttcattc cagagagcat tggaaccaaa 600 tgctggatcc aattatcttt aagcagccct gaaaattctg gctcaggaag ttgtccatca 660 cttgatagtc ctttggatgg agagagctat ccaaaatcac gaatgcctag ggctcagagc 720 tacccagata atcatcagga attiticagac tatgataacc ctatctitga gaaattigga 780 aaaggaggaa catatccaag aaggtatcat gtttcatatc atcatcaaga gtattatgat 840 ggtcgtaaaa cttttccaag agctagaagg acccagggga accagcttac ggtctcctgt 900 gagtttcagt cctactgatc attccttaag cactagtagt ggaagcagta tctttacccc 960 agagtatgat gatagtcgaa taagaagaag gggaagtgac atagacaatc ctactttgac 1020 cgtaatggac atcagcccac ccagccgttc acctcgagct ccgaccaact ggagattggg 1080 caaactgctt ggccaaggag cctttggaag ggtctacctc tgttatgatg ttgatacagg 1140 aagagaattg getgttaage aagtteaatt tgacccegat agteetgaga ccagcaagga 1200 agtaaatgca cttgagtgtg aaattcagtt gctgaaaaac ttgctacatg agcgaattgt 1260 tcagtattat ggctgtttga gggatcccca ggaaaaaaca ctttccatat ttatggaata 1320 tatgccaggg ggttcaatta aggaccaatt aaaagcatat ggcgctctta ctgagaatgt 1380 gactaggaaa tacacccgtc agattctgga gggtgtccat tatttgcaca gtaatatgat 1440 tgtccataga gatatcaaag gcgcaaatat cctgcgagat tcaacaggca acgtcaaact 1500 aggagatttt ggggccagca aacggcttca gaccatctgt ctctcaggga caggaatgaa 1560 gtctgtcacg ggcacaccat actggatgag ccctgaagtc atcagtggag aaggctatgg 1620 aagaaaagca gacatctgga gtgttgcatg tactgtggta gaaatgctaa ctgaaaagcc 1680

```
gccttgggct gaatttgaag caatggctgc catctttaaa atcgccactc agccaacaaa
cccaaagetg ccacctcatg teteagacta tactegagat tteetcaaac ggatttttgt
                                                                1800
agaggccaaa ctgagacctt cagctgatga actcttaagg cacatgtttg tgcattatca
                                                                1860
ctagcageca gtaacetete etgtgeetet acetagetee catetattea tteacettet
                                                                1920
ctctgactgc acttttcttt tttataaaaa aagagagatg ggggagaaaa aagacaagag
                                                                1980
ggaaagtatt totottgatt ottggttaaa tttgtttaat aataataata tootaaattt
tttatattta atctttttt cccttacaag aacttgaagt ttttttttt aatttttata
                                                                2100
atgtactgat ggggttcaaa aagataaagc actttagtac atagtcactc tttttagtac
                                                                2160
aaacaaatca tttggaatac ctaaagattg tagagtcatt ccctctatca ctgacacatc
                                                                2220
agtgacgatg ggaagacatg gaaaacaagg agaagaaaat gatgtataat ttgtagtttt
                                                                2280
2340
ggtaggtact caacttaaag aatataggtt tettettata tetgtattet ttagateeta
                                                                2400
acctetgtet accaacettt ttgeteagta ggagtettga tagaagatat gaatetetga
                                                                2460
gaggtatgtt tatttgttaa tootaaccag tataataagc aaatacacta taatagatco
                                                                2520
acgttactgg aatctgtaaa ccttgaggg
                                                                2549
```

```
<210> 3637
<211> 415
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(188)
<223> similar to gi5726234 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3637
gctgagcttt tgctcgccgt ccaccactgc tgtttgtcgc tgtcgcagac ccgctgctga 60
ctgccatccg tctggatccg gcagggtgtc cactgtgctc ctgatccaat gaggcaccca 120
ttgccgctcc cgatccggct aaaggcttgc cattgttcct gcacagctag gtgcccgggt 180
ttgtcctaat ccagctgaac gctagtcact gggttccacg gttctcttcc gtgatccacg
gcttctaata gagcgataac actcaccaca tggcccaaga ttccattcct tggaatccat 300
gaggccaaga accccaggtc agagaacaca aggcttgca ccatcttgga agcggcccgc 360
caccatcttg ggagctctgg gagcaaggac cccccgaccc aataagagtt tcgca 415
```

```
<210> 3638
<211> 2473
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (34)...(62)
<223> similar to gi4240315 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	3638 -					
acgcgccctg	aattcccggg	tcgacgggag	gcaggagact	gtaatggacg	gggatggggg	60
tccccaggac	ggcctaagaa	gaagcacaca	ggcatggcca	gcattgacag	cagtgcccct	120
gaaacaacat	cggatagttc	ccccacctta	agccggagac	cacttcgagg	gggctgggcc	180
cccacctcct	ggggtcgagg	tcaggacagt	gacagcatta	gcagctcttc	ttcqqactcc	240
ctgggctcct	catcctccag	tggaagtcgc	cgggccagtg	ccagtggagg	agcccgggcg	300
aagactgttg	aagttggcag	gtacaagggc	cgccgcccg	agagtcatgc	ccctcatgta	360
cccaatcagc	catcagaggc	agctgcacac	ttctacttcg	agctggcgaa	gacagtgctg	420
atcaaggcag	ggggcaacag	cagcacttcc	attttcacac	atccatcttc	ctcagggggc	480
caccagggtc	ctcaccgcaa	cctgcacctt	tgcgccttcg	agattgggct	ttatgccctt	540
ggcctgcaca	actttgtttc	tcccaactgg	ctctcacgta	cttattcttc	ccacqtttcc	600
tggattacag	gccaggccat	ggagataggc	agcgcagccc	tgactatact	ggtagaatgc	. 660
tgggatgggc	acctgacacc	ccctgaggtt	gcatccctgg	ctgacagggc	atcacqqqca	720
agagactcca	atatggtgag	ggcggcagca	gagetggeee	tgagetgeet	qcctcacqcc	780
catgcattga	accctaatga	gatccagcgg	gccctggtgc	agtgcaagga	acaggacaac	840
ctgatgttgg	agaaggcctg	catggcagtg	gaagaggcag	ctaagggtgg	gggcgtgtac	900
cctgaagtgt	tgtttgaggt	tgctcaccag	tggttctggc	tatatgagca	aactgcaggt	960
ggctcatcca	cagcccgtga	aggggctaca	agctgtagtg	ccagtgggat	cagggcaggt	1020
ggggaagctig	ggcggggtat	gcctgagggt	agagggggcc	cagggactga	qccqqttaca	1080
gtggcagcgg	cagcagtgac	agcagcagcc	acagtggtgc	ccgtcatatc	gatagaatet	1140
agtttatacc	caggtccagg	actggggcat	ggccactccc	ctggcctgca	cccctacact	1200
gctctacagc	cccacctgcc	ctgtagccct	cagtatctca	ctcacccagc	tcaccctgcc	1260
caccccatgc	ctcacatgcc	ccggcctgcc	gtcttccctg	tgcccagctc	tgcataccca	1320
cagggtgtgc	atcctgcatt	cctaggggct.	,cagtaccctt	attcagtgac	tcctccctca	1380
cttgctgcca	ctgctgtgtc	tttccccgtt	ccttccatgg	cacccatcac	agtacatccc	1440
taccacacag	agccagggct	tccactgccc	accagtgtgg	cctgtgagtt	gtggggccag	1500
ggaacagtga	gcagtgtcca	tccagcatcc	acgtttccag	ccatccaagg	tgcctcactq	1560
cctgccctga	ccacacagcc	cagccctctg	gtgagcggag	gttttccacc	gcccgaggag	1620
gagacacaca	gtcagccagt.	caatccccac	agcctgcacc	acctgcatgc	tgcctaccgt	1680
gtcggaatgc	tggcactgga	gatgctgggt	cgccgggcac	acaacgatca	ccccaacaac	1740
ttctcccgct	cccccccta	cactgatgat	gtcaaatggt	tgctggggct	ggcagcaaag	1800
ctgggagtga	actacgtgca	ccagttctgt	gtgggggcag	ccaagggggt	gctgagcccg	1860
tttgtgctgc	aggagatcgt	catggagacg	ctgcagcggc	tgagtcccgc	tcatgcccac	1920
aaccacctgc	gtgccccggc	cttccaccaa	ctggtgcagc	gctgccagca	ggcatacatg	1980
cagtacatcc	accaccgctt	gattcacctg	actcctgcgg	actacgacga	ctttgtgaat	2040
gcgatccgga	gtgcccgcag	cgccttctgc	ctgacgccca	tgggcatgat	gcagttcaac	2100
gacatcctac	agaacctcaa	gcgcagcaaa	cagaccaagg	agctgtggca	gegggtetea	2160
ctcgagatgg	ccaccttctc	cccctgagtc	tttcaccctt	agggtcctat	acagggaccc	2220
aggcctgtgg	ctatgggggc	ccctcacaca	gggggagtga	aacttggctg	gacagatcat	2280
cctcactcag	ttccctggta	gcacagactg	acagctgctc.	ttgggctata	gettggggee	2340
aagatgtctc	acaccctaga	agcctagggc	tgggggagac	agccctgtct	gggagggggc	2400
gttgggtggc	ctctggtatt	tatttggcat.	ttataaatat	ataaactcct	tttttactct	2460
agtaaaaaaa	aaa					2473
		. •	•			

```
<210> 3639
<211> 2087
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (37)...(1787)
<223> similar to gil769467 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3639
 cagtcattgt ccaaacctgc ttttttccga caaaattcag agaggaggaa cttcaagctg
                                                                        60
 ctggacacta ggaagctgag tcgggatgga actgggtccc cttccaaaat cagccctccc
                                                                       120
 tccactccca gcagccctga tgacattttc tttaaccttg gagacccaca gaacggcagg
                                                                       180
 aagaagagaa agatacccaa gctggtgttg cgaatcaacg ccatttatga ggtccggaga
                                                                       240
 ggaaagaaac gggtgaagag gctgtcccag tcaatggaga gcaactcagg aaaagtgaca
                                                                       300
 gatgagaaca gtgagtctga cagtgacaca gaggagaagc tgaaagctca cagccagcgc
                                                                       360
 ctggtcaacg tgaagtcccg gctgaagcag gcgcctcggt acccatcact tqcccqqqaa
                                                                       420
 ctcatcgagt accaggagag gcagctcttc gagtactttg tggttgtgtc tttgcacaag
                                                                       480
 aagcaggeeg gggetgeeta egtgeeaaaa etcacecaac agtteeetet gaagttggaa
                                                                       540
 aggtetttea agtteatgag agaagetgag gaccaactga aggeeattee ceagttetgt
                                                                       600
 tttcccgatg ccaaggattg ggttcctgtc cagcagttca ccagtgaaac attctcgttt
                                                                       660
 gtettaactg gagaagatgg gageagaagg tteggttact geegaagaet getgeetgga
                                                                       720
 ggcaaaggga agcgccttcc tgaagtttac tgcattgtga gccgcctggg atgcttcagc
                                                                       780
 ctcttttcaa ggatcttgga tgaggtggaa aaaagacgag gcatctctcc tgccctggtt
                                                                       840
cagecaetea tgagaagtgt catggaagee cettteecag eeetgggeaa aaccateett
                                                                       900
 gtcaagaact tcctgccagg ttcaggaact gaggtgatcg aactgtgccg cccgctggac
                                                                       960
 teceggeteg ageaegtgga etttgagtet etetteteet eeeteagegt eegecacetg
                                                                      1020
 gtctgtgtgt ttgcctccct gcttctggag aggagggtca tcttcattgc agacaagctc
                                                                      1080
 agcatectgt ccaagtgetg ccaegegatg gtggegetga tetacecett egeetggeag
                                                                      1140
 cacacctaca teceggiget gecaceegee atggiegaea tegigigete geegaegeee
                                                                      1200
 ttecteateg ggetgetete cagetegetg ceaetgetea gggagetgee getggaagag
                                                                      1260
 gtccttgtgg ttgacctcgt caacagccgg ttcctcagac agatggacga tgaggactcc
                                                                      1320
 atectgeece ggaagettea ggtggeectg gaacacatte tggaacagag gaacgagetg
                                                                      1380
 gettgtgage aggacgaagg geeectagae ggeaggeaeg gtecagagte cageceettg
                                                                      1440
 aacgaggtgg tgtctgaagc ctttgtccgc ttcttcgtgg agattgtggg acactactct
                                                                      1500
 ttgttcctga cgtcgggcga gcgtgaggag agaaccctgc agcgggaggc cttccgcaaa
                                                                      1560
 getgteteet ecaagageet ecgecactte eteggaggte tteatggaga eteagatgtt
                                                                      1620
 teggggette atecaaggag egggagetge geeggeagga tgeeaaaggt etgtttgagg
                                                                      1680
 tecgageeca agagtatetg gaaacaetee eeagtggaga geacageggt gteaataagt
                                                                      1740
 tectgaaggg actaggeaat aaaatgaaat ttetecacaa gaaataacte teageeteaa
                                                                      1800
 gggaaaactt cctcctagtg cagccctatt ctttaaaaac agttcctggt ggcctttctg
                                                                      1860
 aaaggctggg tcccaggttg tcacggtgcg gaactggagg ccgcggtggc ttctggccga
                                                                      1920
 ggctgggctc ttccctggat gaggacctgg gagccgcctg ggaggacagc cccagaaagg
 gagcccgaga ccaggcgtgt cgccgacatg caaatgggtt gttttggtgg ttgagagttt
                                                                      2040
 ttttttttat cttagatatt aaaagtaaga aaaatgaaaa aaaaaaa
                                                                      2087
```

```
<210> 3640
<211> 998
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (907)...(550) <223> similar to gi3925685 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3640
ttttttttt ttaccaatgg aatagcagac tttctgccag attttattgg ttaatggtaa
                                                                   60
tataaaatat aagaaaaaaa caacttcaaa agagtcaaca atctgtatcc atctacatgg
                                                                  120
tatctgacca ccattactgg gcttttgaag tacctcgtag tggacttcac aaatgattct
                                                                  180
taatttttaa aaatgcaaag tgtcttagta tttgtgtatg acatttaaac tcagaattta
                                                                  240
cgtagtatag aaaaatactc accaaaatat ttataagcca cacacttaaa atgcattgaa
                                                                  300
360
aaaaaataaa gtatattgat tgttctttac acattttgat tacactgaat ttgttaattt
                                                                  420
aatattagtt caaataaaca ttgttattta aaaaatgctg agtacacgat taagctgaat
                                                                  480
titgttttcc atcagaaaaa gaacttcagg agtatataat ggtctacagg tgcttcccat
                                                                  540
ccaaaacact aggtetteat cttttgttte ttagaceact caggtgette ttttttagta
                                                                  600
aagagtgttg gtttaggtgt aaatatattg tcttcatgct ctttaggcac attcaaagtc
                                                                  660
tttgatttct gattttctgt cacatgtttt ggttctgttt tagtgagaag taagctgttc
                                                                  720
tcagaatgtt tactatgcat cttaacgaga atctgtttca ttgctgccaa ttcctgacat
                                                                  780
ctttctcaag ttgtgcaata gattccgtca gtgaatcaat cttagaatct ctctgacgca
                                                                  840
ctgattcaat gagatacctg taaggctgtt gagtctggtt taatagcgaa ttggctctgt
                                                                  900
caagctatgt ctgttgtatc tgtatggtgc aaacattaag tactggtatg ctgctgacaa
                                                                  960
tetttaetee atetteagta acettaggtt ggtagttt
                                                                  998
```

```
<210> 3641
<211> 3325
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (137)...(1982)
<223> similar to gi4176525 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3641
ctgagtcgcc tgcaggcagc gtgccaccgg ctgaagctct ggccagagct gcaggacaat
                                                                       60
ggtggggact atgtctcagc tgctttgggc cccctgacca ccctcctgga gcagggcctg
                                                                      120
ggggctcggc tgaacctgct ggctcactct cgacccccag tcccagagtg ggacatcagc
                                                                      180
caagatecae caaageacaa agaetetggg accetgacee tgggaeteet teteeggeet
                                                                      240
gagggactga ccagcgtcct tgagctgggt ccagaggcag accagcctga ggctgctaaa
                                                                      300
ttccgccagt tctggggatc ccgctcggag cttcggcgtt tccaggacgg agccattcgg
                                                                      360
gaagetgtgg tetgggagge ageetetatg teecagaage geettattee ecaccaggtg
                                                                      420
gtcacccacc tettggcact ccatgetgac atcccagaaa cetgtgtcca etatgtgggg
                                                                      480
ggccccctgg atgcacttat ccaaggcctg aaagagacct ccagcacagg tgaggaggcc
                                                                      540
ctggtagcgg cggtacgttg ctacgacgac ctcagtcgcc tactgtgggg gctagagggt
                                                                      600
ctcccactga ccgtgtctgc tgttcaggga gctcacccag tgctgcgcta cacagaggtg
                                                                      660
ttcccaccaa ctccagtccg tccagccttc tccttctatg agactctgcg ggagcggtcc
                                                                      720
```

```
teactgetge eeeggetega taageeetgt eeggeetaeg tggageeeat gaeegtggtt
                                                                       780
tgtcacctgg agggcagtgg ccagtggcca caggacgctg aggccgtgca gcgggtccga
                                                                       840
getgeettee agetgegeet ggeagagetg ttgacacaac ageatggtet geagtgeegt
                                                                       900
gccactgcca cgcacacgga tgtccttaag gatggatttg tgtttcggat tcgcgtggcc
                                                                       960
tatcagcggg agccccagat cctgaaggag gtgcagagcc cagaggggat gatctcgctg
                                                                      1020
agggacacag etgeeteet eegeettgag agagacacaa ggeagttgee aetgeteace
                                                                      1080
agtgccctgc acggactgca gcagcagcac ccagccttct ctggtgtggc acggctggcc
                                                                      1140
aagcggtggg tgcgtgccca gcttcttggt gagggtttcg ctgatgagag cctggatctg
                                                                      1200
gtggccgctg cccttttcct gcaccctgag cccttcaccc ctccgagttc cccccaggtt
                                                                     1260
ggcttccttc gattcctttt cttggtatca acgtttgatt ggaagaacaa ccccctcttt
                                                                     1320
gtcaacctca ataatgaget cactgtggag gagcaggtgg agatecgcag tggetteetg
                                                                     1380
gcagctcggg cacagctccc cgtcatggtc attgttaccc cccaagaccg caaaaactct
                                                                     1440
gtgtggacac aggatggacc ctcagcccag atcctgcagc agcttgtggt cctggcagct
                                                                     1500
gaageeetge eeatgttaga gaageagete atggateeee ggggaeetgg ggacateagg
                                                                     1560
acagtgttcc ggccgccctt ggacatttac gacgtgctga ttcgcctgtc tcctcgccat
                                                                     1620
atecegegge acegecagge tgtggaeteg ceagetgeet cettetgeeg gggeetgete
                                                                     1680
agecageegg ggeeeteate cetgatgeee gtgetggget atgateetee teagetetat
                                                                     1740
ctgacgcage tcagggagge ctttggggat ctggcccttt tettetatga ccagcatggt
                                                                     1800
ggagaggtga ttggtgtcct ctggaagccc accagcttcc agccgcagcc cttcaaggcc
                                                                     1860
tccagcacaa aggggcgcat ggtgatgtct cgaggtgggg agctagtaat ggtgcccaat
                                                                     1920
gttgaagcaa teetggagga etttgetgtg etgggtgaag geetggtgea gaetgtggag
                                                                     1980
gecegaagtg agaggtggae tgtgtgatee eagetetgga geaagetgta gaeggaeage
                                                                     2040
aggacattgg acctctagag caagatgtca gtaggatgac ctccaccctc cttqqacatq
                                                                     2100
aatcetecat ggagggeetg etggetgaac atgetgaate atetecaaca aaacceagee
                                                                     2160
ccaactttct ctctgatgct ccagcattgg ggcaggggca tggtggccca tgtagtctcc
                                                                     2220
tgggcctcac catcccagaa gaggagtggg agccagctca gagaaggaac tgaacccagg
                                                                     2280
agatecatec acetattage cetgggeetg gaceteettg egattteeca eteettett
                                                                     2340
agtettette cagaaacaga gaaggggatg tgtgcetggg agaggetetg teteetteet
                                                                     2400
gctgccagga cctgtgccta gacttagcat gcccttcact gcagtgtcag gcctttagat
                                                                     2460
gggacccagc gaaaatgtgg cccttctgag tcacatcacc gacactgagc agtggaaagg
                                                                     2520
ggctatatgt gtatgaatag accacattga aggagcacaa tgccctcctg tgttgatgcc
                                                                     2580
acttcccagg gtggagacag tggaaaagaa ccgaggacag gaaaggattg ggtaggtgaa
                                                                     2640
ggggtcaggg gactggtagt cacccaatct tggagaggtg caaaaagcac tgggggctac
                                                                     2700
cogttagety catetyccet ggetgtttge cogtteatgt cacaaactge cactactatg
                                                                     2760
tacctgcagt ggggttgcag agatggggga gactcaagtc ttactcccca ggagctccca
                                                                     2820
gggcccaagg aggagaatgc tgcctccttt cagtctggtc tacacccact ttctggtagc
                                                                     2880
ctctctgctt cctgtaattc tggctgtttt tccagactca gctcaaataq tqcccctcct
                                                                     2940
taagcccatc cctcgccccc agcctgaggt gatctttccc tcctctgaac tattagagca
                                                                     3000
gttactgtct gttcagttcg tttggcaggc acacacagtg gcataaattc tattgttttg
                                                                     3060
aactotgatt taaaattaaa ttgcagotgg gogtagtggo toatgottgt aatoccaaca.
                                                                     3120
cttagggagt caggagaatc acttgagctc aggagttcta gaccaatctg ggcaacagag
                                                                     3180
agaccccatc tettttaaat aaaaagttaa attgettaat tteeccegta tteetggeet
                                                                     3240
gtctgcccct ttcacataat tttaacctgg tttcttgtat gtaaactcct tgagggcaag
                                                                     3300
aacatgtttg aacataaaaa aaaaa
                                                                     3325
```

```
<210> 3642
<211> 1938
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature <222> (1)...(1939)

```
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(812)
<223> similar to gi4886467 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3642
gtggaaagaa cagtcagaaa gcctctcctg tggatgatga acagctgtca gtctgtcttt
                                                                     60
ctggattcct agatgaggtt atgaagaagt atggcagttt ggttccactc agtgaaaaag
                                                                    120
aagteettgg aagattaaaa gatgtettta atgaagaett ttetaataga aaaceattta
                                                                    180
tcaataggga aataacaaac tatcgggcca gacatcaaaa atgtaacttc cgtatcttct
                                                                    240
ataataaaca catgctggat atggacgacc tggcgactct ggatggtcag aactggctga
                                                                    300
atgaccaggt cattaatatg tatggtgagc tgataatgga tgcagtccca gacaaagttc
                                                                    360
acttetteaa cagetttttt catagacage tggtaaccaa aggatataat ggagtaaaaa
                                                                    420
gatggactaa aaaggtggat ttgtttaaaa agagtcttct gttgattcct attcacctgg
                                                                    480
aagtccactg gtctctcatt actgtgacac tctctaatcg aattatttca ttttatgatt
                                                                    540
cccaaggcat tcattttaag ttttgtgtag agaatataag aaagtatttg ctgactgaag
                                                                    600
ccagagaaaa aaatagacct gaatcttcag ggttggcaga ctgctgttac gaagtgtatt
                                                                    660
ccacaacaga aaaacgacag tgactgtgga gtctttgtgc tccagtactg caagtgcctc
                                                                    720
gcccttagag cagcctttcc agttttcaca agaagacatg ccccgagtgc ggaagaggat
                                                                    780
ttacaaggag ctatgtgagt gccggctcat ggactgaaac tcagcaggga ctctgggaag
                                                                    840
tctgaccaag ttggagcaga tggtttgtta cttgaatctc caaacactta gttgaatttt
                                                                    900
960
ttgcccttaa ttccatttct cccagctacc atgtactatt gtttaatgtt cagtttggtt.
                                                                   1020
tcatttttaa ttttatggtt ctgtgcgtcc cccatattta atatttatta ttcaaacgca
                                                                   1080
tgcatataga cagagcatgc agtgaagagt attaaaaaaa aaagcttagt agatttggtg
                                                                   1140
cagettttga aaettaggtt agaegtgaaa etgaaataea ggttteaaat ttaetteeee
                                                                   1200
agaacctaaa aatgcaagat gtttttgata ccaaccataa cctcctgaga atagtaagtg
                                                                   1260
ttcccccggg gcattaaggg taagcctggg ggtggttttt gaccaaatcc cagtccctgt
                                                                   1320
tttaccttta cccageggca actttcacec aacttcccct ctcccaagtg agtcttagag
                                                                   1380
agtgcagtcc catteetttt tgaagggtga gatggaagtg gtcgtaaact gactggtgtc
                                                                   1440
ttctgtttct gggaggcaca cttgtaaggc acagtggctg ctttgggagg agtaaggtgt
                                                                   1500
gagaaaaagc aaccttggag gccagtaaca atgacagatt tcaatcgtgg ttttaggaat
                                                                   1560
tataatacgt ggcatacatc tcataaaggc ttttgctggg atattgaatt ccctgaattt
                                                                  1620
ttötgttttc gacctgttaa aaaaatctta acatccatca aactagtggt caaacaaatg
                                                                   1680
agaatgcage tgttctcaga gtaattttta agttgtcatt tccctgtgtt gcctcccaat
                                                                   1740
tggaagaagt taaggtttac caaatgcatt tctatttcaa gggtatctga aacgtaaaca
                                                                   1800
ttcaaaactg aaggetgaet gaettnagat gttttgeagg tggetggaga gaacagggaa
                                                                   1860
ggtaatagag acacacttag teccatggga agegeageae egttgtaggt tettteteet
                                                                   1920
gtcccattag cgacctca
                                                                   1938
```

```
<210> 3643
<211> 3654
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<400> 3643
cagacactga aatctgatgt tttgttggga actgctgcat tagatattta tgaaacatta
                                                                       60
aagtcaaaca atatgaaact tgaagaagta gttgtgactt tgcagcttgg aggtgacaaa
                                                                      120
gagccaacag agacaatagg agacttgtca atttgtcttg atgggctaca gttagagtct
                                                                      180
gaagttgtta ccaatggtga aactacatgt tcagaaagtg cttctcagaa tgatgatggc
                                                                      240
tccagatcca aggatgaaac aagagtgagc acaaatggat cagatgaccc tgaagatgca
                                                                      300
ggagctggtg aaaataggag agtcagtggg aataattctc catcactctc aaatggtggt
                                                                      360
tttaaacctt ctagacctcc aagaccttca cgaccaccac cacccacccc acgtagacca
                                                                      420
gcatctgtca atggttcacc atctgccact tctgaaagtg atgggtctag tacaggctct
                                                                      480
ctgccgccga caaatacaaa tacaaataca tctgaaggag caacatctgg attaataatt
                                                                      540
cetettaeta tatetggagg eteaggeeet aggeeattaa ateetgtaae teaageteee
                                                                      600
ttgccacctg gttgggagca gagatggac cagcacgggc gagtttacta tgtagatcat
                                                                      660
gttgagaaaa gaacaacatg ggatagacca gaacctctac ctcctggctg ggaacggcgg
                                                                      720
gitgacaaca tgggacgtat ttattatgtt gaccatttca caagaacaac aacgtggcag
                                                                      780
aggccaacac tggaatccgt ccggaactat gaacaatggc agctacagcg tagtcagctt
                                                                      840
caaggagcaa tgcagcagtt taaccagaga ttcatttatg ggaatcaaga tttatttgct
                                                                      900
acatcacaaa gtaaagaatt tgatcctctt ggtccattgc cacctggatg ggagaagaga
                                                                      960
acagacagca atggcagagt atatttcgtc aaccacaaca cacgaattac acaatgggaa
                                                                     1020
gaccccagaa gtcaaggtca attaaatgaa aagcccttac ctgaaggttg ggaaatgaga
                                                                     1080
ttcacagtgg atggaattcc atattttgtg gaccacaata gaagaactac cacctatata
                                                                     1140
gatccccgca caggaaaatc tgccctagac aatggacctc agatagccta tgttcgggac
                                                                     1200
ttcaaagcaa aggttcagta tttccggttc tggtgtcagc aactggccat gccacagcac
                                                                     1260
ataaagatta cagtgacaag aaaaacattg tttcgaggat tcctttcaac agataatgag
                                                                     1320
cttcagtccc caagatctgc gaagacgttt gtgggtgatt tttccaggag aagaaggttt
                                                                     1380
agattatgga ggtgtagcaa gagaatggtt ttttcttttg tcacatgaag tgttgaaccc
                                                                     1440
aatgtattgc ctgtttgaat atgcagggaa ggataactac tgcttgcaga taaaccccgc
                                                                     1500
ttcttacatc aatccagatc acctgaaata ttttcgtttt attggcagat ttattgccat
                                                                     1560
ggctctgttc catgggaaat tcatagacac gggtttttct ttaccattct ataagcgtat
                                                                     1620
cttgaacaaa ccagttggac tcaaggattt agaatctatt gatccagaat tttacaattc
                                                                     1680
tctcatctgg gttaaggaaa acaatattga ggaatgtgat ttggaaatgt acttctccgt
                                                                     1740
tgacaaagaa attctaggtg aaattaagag tcatgatctg aaacctaatg gtggcaatat
                                                                     1800
tettgtaaca gaagaaaata aagaggaata catcagaatg gtagetgagt ggaggttgte
                                                                     1860
tcgaggtgtt gaagaacaga cacaagcttt ctttgaaggc tttaatgaaa ttcttcccca
                                                                     1920
gcaatatttg caatactttg atgcaaagga attagaggtc cttttatgtg gaatgcaaga
                                                                     1980
gattgatttg aatgactggc aaagacatgc catctaccgt cattatgcaa ggaccagcaa
                                                                     2040
acaaatcatg tggttttggc agtttgttaa agaaattgat aatgagaaga gaatgagact
                                                                     2100
totgoagttt gttactggaa cotgoogatt gooagtagga ggatttgotg atotoatggg
                                                                     2160
gagcaatgga ccacagaaat tctgcattga aaaagttggg aaagaaaatt ggctacccag
                                                                     2220
aagtcatacc tgttttaatc gcctggacct gccaccatac aagagctatg agcaactgaa
                                                                     2280
ggaaaagctg ttgtttgcca tagaagaaac agaaggattt ggacaagagt aacttctgag
                                                                     2340
aacttgcacc atgaatgggc aagaacttat ttgcaatgtt tgtccttctc tgcctgttgc
                                                                     2400
acatcttgta aaattggaca atggctcttt agagagttat ctgagtgtaa gtaaattaat
                                                                     2460
gttctcattt agatttatct cccagtgatt tctactcagc gtttccagaa atcaggtctg
                                                                     2520
caaatgacta gtcagaacct tgcttaacat gagattttaa cacaacaatg aaatttgcct
                                                                     2580
tgtcttattc cactagttta ttcctttaac aacaatattt tatgtgtgtc aaaagtctca
                                                                     2640
cttgggagta gtgtttttt cttttagaca ttctgcagac atgcagggaa gtcctttggt
                                                                     2700
aactgcaata tacaagattt tcctattaag cctcttggta agaggcattt gttaaaagtg
                                                                     2760
caagettaet cetgettetg gggatgtgag caaaattegg gettgtgtte teeeteteat
                                                                     2820
tttagtctga cttgactatt gtttttcctt tctggcgcat gaatccatac atcattcctg
                                                                     2880
gaagtgaggc aagactcttg catctctaca aagtagtttt gtcaatttga attcagggaa
                                                                     2940
```

```
aagttggtca cagcctgcaa atgacttcat ttggaagtct gattgtttca gttgcctgac
                                                                     3000
aaatactaca ctttacaaac aatgttaaca ctgtgattcc ttcattgttt taagaagtta
                                                                     3060
acctagggcc gggcatggtg gctcatacct gtaatcctag cactctggga ggccgaggca
                                                                     3120
ggaggatece tttageceag gagttaaaga ceageetggg caacataggg agaeeetgte
                                                                     3180
tttttttttg ggcagcgtgg tgggggataa ataaataaaa ggaaaaaaaa cttagcctag
                                                                     3240
aattagaatt aatttaattg aattcatcta aagatgtctc tggtgatttt tatatgttcc
                                                                     3300
gctatataat tgatgcttta tagttttatc ataatccaac aacttcagtt atatttaatt
                                                                     3360
attgttaagg agtttaagac tagaaagact agagtgcttt ctagtccaaa tagaggtcag
                                                                     3420
tgaaacagct tttgacatca gattttcatt tgagagggag agctgtggta ctggctaaaa
                                                                     3480
agaaaggaag ataacatcca gtaaccacag gaatatattc tctgtgaatt aaaagtcttc
                                                                     3540
aaagttatca tttctctgac atatgttgga gtagtcattt ccattcttta cattgtcatg
                                                                     3600
aactggattg ataaccctca totgcaatat tttcacccct aaaattttta acaq
                                                                     3654
```

```
<210> 3644
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1230)...(422)
<223> similar to gi3114818 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3644
ttttttttt ttccaatctt cattctcggg gttggcccgc cccgatagtc actccatgtc
                                                                       60
ctcgtttact ggttcatctt cgtaatctct gtcatggtca aaatctggac tgtggttggc
                                                                      120
tgttgtcact aaggacaggg gcccttcagc ttcctctgga tcgaggggct cttctttgac
                                                                      180
gtgtacagga tgcacggctt gcataggaga tctgcctgga ctgctgtcac tctcgttgct
                                                                      240
gttggtatgc tccattgccc cgttcagctc ttcccgtatt gcgctggcta agttgcccag
                                                                      300
agtgggattt cccatggaag cggtagtgta tagaggtata ctattctcag ccattgaagc
                                                                      360
ctgtaaagct gcattgagag gtgtgcagta ggcgtggctg ctctgcatgt ttttaataag
                                                                      420
ggaagggtta ccactgatct tttgtggcct tcgtttttgg aattctactt catccactgt
                                                                      480
ccatactgcc cctttaacgt tttctactcg cacaaaacac ttgtgaagac taagattatg
                                                                      540
acgcactgca ttcttccacg tggccgcgtt gcgtcggaag taagcaaaca ttcgtgtgaa
                                                                      600
ccagttatag atctcattta gtgttagctg cttttctgga gattcgagaa tggcctgcct
                                                                      660
aattaaagat gcatatgtaa atggtggtct aacttctgcg ttcttataaa attcttggtt
                                                                      720
ctgcgcaata tctgctgacg aaatgggcac gttgtatttg tctgagtacc gcctgcggat
                                                                      780
gggtcccccc gtgtgcatgc tggtggttgt gatgacagag gggccttggg tgacgggagt
                                                                      840
caggggggcg gttggggtcg ttggagtatg aggtaagctc tgtggagaag cctccgatgc
                                                                      900
ggacttggag agagtgacac ttgataccag attcaagggc tgaggggcgg ctttgggttc
                                                                      960
tgtagacttc acatgcaggt gggtcatcat ggcttgcagg cgttctttgt cttttgcaag
                                                                     1020
ctgtagetet aactgetgta caacetgeat ttgtacteta cattgggetg tacttetate
                                                                     1080
gtccagcgca tgctcactgt tgagatgttt tagaaatgat tggaaatctt cgcacactgc
                                                                     1140
ttcacagect ggccacttge atacaccatg tecatagaga ggatggetat gggagtgete
                                                                     1200
ctcatgggac aaactttccc ttttgggagt gtggactgag agctgtccat tggtagaggc
                                                                     1260
atgtgggttc attattaagg aggtcttgga aggtgcagag gaggagacac atgtcgtggt
                                                                     1320
cagatccaaa ctgctgtgat tgttg
                                                                     1345
```

```
<210> 3645
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1284)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1225)...(762)
<223> similar to gi5107820 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3645 gatttcagtt gcctgaaagc tgtaagtctg cttttttaaa agagaaattg gagttaagca 60 gacttttcat tttttgatca tgaccctgga aagagaaata tatttgacat caaaactcag 120 cacatatect tggtetatat atacaeatga aagttteata aaacaataca etgatatttt 180 ccatgctgta ttctatttca ttttttaaaa tgctggttgt atcccattaa actggtttca 240 aaataaatat aacatgtaca caacaacaac aaaaaaaaac actgggttag agggccagta 300 agctcagcga gtatcagcaa ctgagacttc atccttgtct cacaaggact aaaaagagaa 360 taatgttete attatgtggt teaatgeeac acceatgtat etgagatata catgteacaa 420 tetgggagaa geetgteete aatttaettt aaataeeeaa ttetgeetag aacatgaatt 480 agacacatag taagetettg agtgaagtge agatgataat gacaegatea cataceaett 540 aaaaatatct taacaccttt acttagatct catctcatac ttgtagcatt tcttcaaatt 600 tactttgaaa aaagagette actgtgtgtg gttgtcatac acattettet acceaaceat 660 ggacctettt tttcctctca ggcgcacttc atctaatttt tttagcactg gcctggcctt 720 tttggaggag gtggagtagc tcttcagaaa ggcttcaaac acagtttcag tgttgggatg 780 ggtactgagg aaggeettet ceaggacata gaggtetact ceettateet etggaagtge 840 tgaaatgaaa ctcagcccaa agtctatgag cacaatgttc agctgttcca gggggggttt 900 caggagcatg ttggaggtgg tgagatcacc atgaatgagg tcttcatcgt gcattcgagc 960 caaaacctgc ccaattgtct tggctaagtt ggagagaccc tggggagttt ttttcagtct 1020 ccatagtgga ctgaatataa tctcgaacag tcactgagcc ttcaatttct tccatatata 1080 agcagttgga agcatagtcc acaaaaaaga caactggggc agatattcca gcgcgqcgac 1140 ageggaggag egecegggee teetgeaceg teegeegtet gecaageege geeteeageg 1200 ccgggtgccg gtagccttgg gaagcggtgc ttnnttncnn ggccttgcta gcccctggc 1260 tcattnnccc cggcccggtc tcc 1283

```
<210> 3646
<211> 1584
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (1585)...(603) <223> similar to gi206297 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3646
ttttttttt ttggatttaa aaacacttta tagtgtgttg tttttattga gcgctcacac
                                                                       60
ccgaaggggt ggcggcggat gctgtgggtg agtggggccg cctgagcctg ctcgggccac
                                                                      120
atccacacat ccacagagte cacetggact eggaggaagg eegagaggae aeggaeggtg
                                                                      180
gccacaccca cgctgcagtg aaggcccaag tgtgatggca gagaaagagg gaaagttgga
                                                                      240
gaaagagcgg tatctgacaa taacttttct cttggatgtt aattttttgg tctataaatt
                                                                      300
ggaaaggaag gctcggactg aaataaatac atttattctg agtaatgacc ttttgggagc
                                                                      360
agtgtccgtc aactctgctt cgagagcgtc tccacgtgag gcagcagcgc ctgtctcgcg
                                                                      420
cetegeegag geggaaceae acegggeete cageggagge ggetttetee tgtgtetgtg
                                                                      480
aagggaagta gcaggtgtgt cactgttctt aatggagcgg acaatgatgc cttttctctg
                                                                      540
acagaaaaat gtccggctta actatgcaag acaagacttg gtcgtcacgt tcgcgtctct
                                                                      600
agttgatttt gtcctggaat atgtacaagt tattggtggc agccacggca atgacattgt
                                                                      660
ccacggggtg ccaggctgtg tgcaggatct tcttgttgaa gtccagactg tccacactga
                                                                      720
totogtottt cotocgotta coccocgtac acacettocg gggtttgagg ctggcgcg
                                                                      780
gtttgctgct ctctctcgag gcctccaggg tcacatccct ccgcgtgtct ctatcaaaca
                                                                      840
tectgaagaa gttgttatag gaeceggtea tgatggeget atecgaaceg ttecageaac
                                                                      900
actcaaactt gtcaaagatg cagtcgttct catagagaga gcagagcttg ctgcgcaggt
                                                                      960
actcgtggac ctggtgggtc tccaccggcc tgctctccat gttgaggtcc cacaccttca
                                                                     1020
ccgacaggta gtctctggtc atcatgtacc gcccactatg actgaatttt acatcggata
                                                                     1080
tggatgaaat tatttctgag aagaaggacc tactgctggg atcttcaggc tcttcaaaaa
                                                                     1140
acttggagtg tetgtegeac agggeegagg agegeatgte acaeaggegg atggteeett
                                                                     1200
tgctactgct gtagacgaac acgttgcact ggtgcgggtg gaactcggct gcaqtqatqa
                                                                     1260
cttcggtcag ctcctccatg ttagcaggct tgatgtccac gatgttaaag cttctatctg
                                                                     1320
tgatttctaa gtgccataaa ttaattctca ggtcatccgt agcgccgtga tcctaaatgg
                                                                     1380
gtctcgaagt cttccatctt cgtctttcag gttataacct tctgctcttt tatcccgttc
                                                                     1440
acttattttc cataatttta tagttttatc atttgtagac agtagaaaat gagcagcatt
                                                                     1500
ctgttgtggt aaccacctaa ttttattaat tttttcctca atttctagac ttttcaaata
                                                                     1560
gtcgatctcc ggttcatgac tgtg
                                                                     1584
```

```
<210> 3647
<211> 2149
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1046)...(1711)
<223> similar to gi3873795 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3647
acgagcctgc gttttccggc cagaggacat gatgcagggg gaggcacacc ctagtgcttc 60
ccttattgac agaaccatca agatgagaaa agaaacagag gctaggaaag tggtcttagc 120
```

```
ctggggactc ctaaatgtat ctatggctgg aatgatatat actgaaatga ctggaaaatt
                                                                      180
gattagttca tactacaatg tgacatactg gcccctctgg tatattgagc ttgcccttgc
                                                                      240
atetetete ageettaatg eettatttga titttggaga tattteaaat ataetgtgge
                                                                      300
accaacaagt ctggttgtta gtcctggaca gcaaacactt ttagggttga aaacagctgt
                                                                      360
tgtacagact acgectecae atgatetgge ageaacecaa atcecteceg etceacette
                                                                      420
cccttcaatt cagggtcaga gtgtgttgag ttatagccct tctcgttcgc ccagtaccag
                                                                      480
teccaagite accaecaget gratgactgg tracagecet cagetgeaag gretgreete
                                                                      540
aggtggcagt ggttcttata gccctggagt gacctactcg cccgtcagtg gttataataa
                                                                      600
gttggcgagc tttagcccct ctcctccttc tccgtaccct accactgttg gaccagtgga
                                                                      660
gagcagtgga ttgagatete getacegtte tteacetace gtetacaaet cacetactga
                                                                      720
caaagaagac tacatgaccg acctacgaac tttggatact, tttctcagaa gtgaagagga
                                                                      780
gaaacagcat agggttaagc tggggagccc agattctacc tctccttcca gcagtcctac
                                                                      840
tttctggaac tatagtcgtt ctatggggga ttatgcacaa actttaaaga agtttcagta
                                                                      900
tragettger tgtaggtete aggercatg tgetaaraaa gatgaagerg atetragete
                                                                      960
taaacaagcc gcagaagagg tctgggcaag agtggctatg aatagacaac ttcttgatca
                                                                     1020
tatggattca tggacagcta aatttagaaa ttggatcaat gagacaatat tagtgccact
                                                                     1080
tgttcaagag attgagtetg teageaeaea gatgagaega atgggttgte eagagetaea
                                                                     1140
gataggagag getagtatta etagettgaa acaagetgee etggttaaag egeeteteat
                                                                     1200
tecgaetttg aacacaateg tteagtatet agaeettaet ecaaateagg aataettgtt
                                                                     1260
tgaaaggatc aaagaactat ctcagggagg ttgtatgagc tcatttcgat ggaacagagg
                                                                     1320
tggcgactic aaaggacgaa agtgggatac agacctgccc accgattctg ctatcatcat
                                                                     1380
gcatgtattt tgcacctacc ttgattccag attacctcca catccgaagt atcccgacgg
                                                                     1440
aaaaactttt acttctcagc actttgttca gacaccaaat aaaccagatg ttacaaatga
                                                                     1500
gaatgttttt tgcatttatc agagtgctat caaccctccc cattatgagc tcatctacca
                                                                     1560
gcgtcatgta tacatacctg ccaaagggca gaaataatat gtttcataca ttgttgatgt
ttctctacat cataaagacc aaagagtcag gaatgcttgg gagagttaat cttggtctat
                                                                     1680
ctggtgtgaa tatattgtgg atctttggcg agtagcaagt catatattta attctgacat
                                                                     1740.
ttagactatt tcactgaacc agaagtegaa actaaacate tetgagecae tgaetettet
                                                                     1800
gaaataaaat acacatgggt gtatgttaca gactctttag atttaacaga aaatgtagct
                                                                    1860
gttatgaaat gtaattgtaa aaatatgtcc cgtatcttct atatcgagac attgccttta
                                                                     1920
attitatate gettiteaga aattiteagit gaetacaaaa etgeaaceet teggattitt
                                                                     1980
attgactcaa aatagtgcca ttccccttaa tgaaatagat tttgagtctt tttttcattg
                                                                     2040
taaccccaa atgagaatca tetacetgat tettgtacca aaaaaaaatt tttttcagte
                                                                     2100
ttttttttt ttaaagaggg tttttgccaa cccaaactgg agggcaggg
                                                                     2149
```

```
<211> 831
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (834)...(92)
<223> similar to gi2232013 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3648

```
<400> 3648

ttttttttt ttcaggtgaa attaaactga tttaatcagc acacattata tacatgtatc 60
aaatttcaca ctccataaat atgtataact tatatgtcat ttaaaaaataa tgataaaatt 120
atatccagat tcaagcgcct cttgtagcgc ttcccacagt cctcacattt ggatgggttt 180
```

```
tetecaetgt ggtaetettt gttggtettt acagtatgae egggeataea ageetettte
                                                                      240
cacagtette acattteaat ggetttettt ggeagtggag tttettatga tteaaaatae
                                                                      300
tagaagcatg totaaagcto ttoocgcagt tatcacagtt ataagatoto totoccgtgt
                                                                      360
gggttctatg gtggaagtca agacctgact tactaatgta gcccttccca cactcctcac
                                                                      420
atttgtatgg cttttctcca gtgtggactc gttgatggac caaaagatat gaggaccatt
                                                                      480
tgaagctctt cccacattct ttacaattat atggtttctg tcccatatga atcatctgat
                                                                      540
gcttatgcaa atctagccta tcaatgaaac ctcttccata cttttcagat ttgtacagtt
                                                                      600
tetetgetgt gtggaccatg caatgeetat taagaettga cetaagaeag aagetettae
                                                                      660
cacatatttc acatttgaat ggcttctccc cagtatgaat tctgtgatgt ttctgaagct
                                                                      720
ggaaattgtg catgaaagcc ttcccacatt tctcacaatt ataaggtttc tctcctgtgt
                                                                      780
gtaatttgca gtgaacttga agtatcgctc tacatctgaa gcctttccca c
                                                                      831
```

```
<210> 3649
<211> 770
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (773)...(600)
<223> similar to gil232163 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3649
aacgaatetg getetgeetg aateategat gacagggeaa aggeaactgg agcagatggg
                                                                  60
agetetggea aacaegggag gagggtettg gaagageeee egteeecage ggetagatge
                                                                 120
ttacacatgg acgatctact ctcctgactg tggcctcatc aggctggtgc ctaccatctg
                                                                 180
tggttgtaaa ggtcccaaag agggcctacg gaaaggacag gtgggctgga aggaatgtgg
                                                                 240
agaatgaccc ccaggacagg ggaggaggag actggcccca tcaatccagt tcacagccgg
                                                                 300
gaaaagtgca ggaagacaga caaacgaccc caatgtgggc gaaggacaca cctccaagga
                                                                 360
ctggagccgc agagtccacg tgacaaggag acccaggata gaaacactgt gcggaggaca
                                                                 420
cggtgtcaac ctcggaaggg gcctcctatg ctttccacac caaattcccc cacgggagaa
                                                                 480
accetgecae aaggeecagg aaaccacaga ceccaageca actgtgeeta geacagacae
                                                                 540
caaggaatga cagcgatgcc agtgacgcca ggaggacttg gcccctagcc ccatcatcgg
                                                                 600
ctgtatgatg attggtgtt ctgcggcctc cctctcgtca gactgcagcc ttgggggaca
                                                                 660
720
gcggttgaag cagcaccaca gacagcagca gcagtagcag caggtgagga
                                                                 770
```

```
<210> 3650
<211> 2069
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (24)...(1701)
```

<223> similar to gi2224713 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3650
ggcacgaggc ccagtggtat gggcctagtc cagactgcca caagtcccac ccattctacc
                                                                       60
acaagcccca cccatcccac cacaagcccc atccttataa atgtaagccc ttccacttct
                                                                      120
ctagaacttg ctaccctctc cagcccctcc aaacactcag accccaccct cccaggcact
                                                                      180
gactecette cetgtagtee eccagtetee aattectaca etcaggeaga ecctatggee
                                                                      240
cccagaactc cccacccaag tcctgcccat tccagtagga aacccctcac aagccctgcc
                                                                      300
ccagatecet cagagtetae ggtteagagt ctaageecea eteceteace eccaaceeet
                                                                      360
gcaccccagc attcagacct ttgcctggcc atggctgtcc agaccccagt cccaacggca
                                                                      420
gccggagggt ctggggacag gagcctggag gaggcactgg gggccctaat ggctqccctq
                                                                      480
gatgactacc gtggccagtt tcctgagctg cagggcctgg agcaggaggt gacccqccta
                                                                      540
gaaagtetge teatgeagag acaaggtetg actegeagee gggeeteeag teteageate
                                                                      600
actgtggagc atgccttgga gagcttcagc ttcctcaatg aagacgaaga tgaagacaat
                                                                      660
gatgttcctg gggacaggcc tccaagcagc ccggaggctg gggctgagga cagcatagac
                                                                      720
tcacccagtg cccgcccct cagcacgggg tgtccagctc tggatgctgc cttggtccgg
                                                                      780
cacctgtacc actgcagtcg cctcctgctg aaactgggca catttgggcc cctgcgctgc
                                                                      840
caggaggcat gggccctgga gcggctgctg cgggaagccc gagtactgga ggcagtatgc
                                                                      900
gagttcagca ggcggtggga gatcccggcc agctctgccc aggaagtggt gcagttctcg
                                                                      960
gcctctcggc ctggcttcct gaccttctgg gaccagtgca cagagagact cagctgcttc
                                                                     1020
ctctgcccgg tggagcgggt gcttctcacc ttctgcaacc agtatggtgc ccgcctctcc
                                                                     1080
ctgcgccage caggettggc tgaggetgtg tgtgtgaagt tcctggagga tgccctgggg
                                                                     1140
cagaagetge ccagaaggee ccagecaggg cetggagage ageteacagt ettecagtte
                                                                     1200
tggagttttg tggaaacctt ggacagcccc accatggagg cctacgtgac tgagaccgct
                                                                     1260
gaggaggtgc tactggtgcg gaatctgaac tcggatgatc aggctgttgt gctgaaggcc
                                                                     1320
ctgagattgg cgcccgaggg gcgtctgcga agggacgggc tgcgggccct cagctccctg
                                                                     1380
ctcgtccatg gcaacaacaa ggtcatggct gctgtcagca cccagctccg gagcctgtca
                                                                     1440
ctgggcccta ccttccggga gagggccctc ctgtgcttcc tggaccagct ggaggatgag
                                                                     1500
gacgtgcaga ctcgagtggc tggctgcctg gccctaggct gcatcaaggc tcccgagggc
                                                                     1560
attgagecee tggtgtacet etgecaaaet gacacagaag etgtgaggga agetgeeegg
                                                                     1620
caaagcctac agcagtgtgg agaagaggga cagtctgccc atcgacggct ggaggagtcc
                                                                     1680
ctggacgccc tgccccgcat ctttgggcct ggcagcatgg ccagcacagc attctaaact
                                                                     1740
attcacccat gggttcctgg tgcccctttc cccccacttt cagggctcac caggcactgg
                                                                     1800
cagggagggt aagggctggc tccagatacc cctccccac agattcctag caatgaaaat
                                                                     1860
ctaatatatt cttctgttgc ccctggggtt ggagagtcag tgcctgcagt caagtgcctc
                                                                     1920
ccagcctcgg ctcagcacat cccttgccac aaatcagtgt ctggggcttg gccaccctgc
                                                                     1980
cgctgcccag ccacatccct tggttttgta ttttatttac agagttttac agaaaataaa
                                                                     2040
aaagcaaaat gtctttccta aaaaaaaaa
                                                                     2069
```

```
<210> 3651
<211> 1678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (199)...(998)
<223> similar to gi3874973 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3651
gcggtggaat tcatagacct cttacctgaa ggaaagagac aggcagcaat tgataaaatg
                                                                       60
accaagaaaa tgcagaagac cctagagaac accaagttcc gaggtgcacc gattataccc.
                                                                      120
gtggcggcca agccgggggg accagaggcc cccgaaactg aagctccaca gggcattcca
                                                                      180
gagctcattg aggtggtgaa gaaggtgaag tccatgcaga tgttccacat gcccatcact
                                                                      240
teagecatge aaggagaceg getgggeate tgegteacee agtttgacee taagetgetg
                                                                      300
gagcgcgggt tggtgtgtc ccccgagtcc ctgcacactg tccatgcggc cctcatctct
                                                                      360
gtggaaaaga taccgtattt ccgggggccc ctgcaaacca aggccaagtt ccacattaca
                                                                      420
gtgggccatg aaacagtcat gggccggttg atgttcttca gtcctgctcc agataacttt
                                                                      480
gaccaggage ctatactgga ctettteaac tteteteaag aatacetttt ecaggageag
                                                                      540
tacctgtcca aggatttgac accagcagtg acagacaatg atgaggccga caagaaggcc
                                                                      600
ggccaggcca cagagggcca ttgtcctcgg cagcagtggg ccctggtgga gtttgagaag
                                                                      660
cccgtcacct gccctcggct gtgcctggtg attggctcca ggctagatgc ggacattcac
                                                                      720
accaacacgt geeggetage ettecatgge atcetgetee aegggetaga ggacaggaac
                                                                      780
tacgccgaca getteetgee caggetgaag gtgtacaage tgaagcacaa geatggeett
                                                                      840
gtggagcggg cgatggatga ctacagtgtg atcggccgct ccctgttcaa aaaggaaacc
                                                                      900
aacatccage tettegtggg getcaaggtg caettgteca etggggaact gggcatcate
                                                                      960
gacagtgcct teggecagag eggeaagtte aagateeaca teecaggtgg eeteageeee
                                                                     1020
gagtecaaga agateetgae accegeeete aagaageggg eeegggetgg eegtggggag
                                                                     1080
gccaccaggc aggaggagag cgccgagcgg agcgagccct cacagcatgt ggtgctcagc
                                                                     1140
ctgactttca agcgttatgt cttcgacacc cacaagcgca tggttcagtc tccctgagtg
                                                                     1200
teeggtgace teecceaggg ceteettgee cageceagte caggetgetg tgecaaatee
                                                                     1260
caaccagcca cgcctcagcc tctcccagtc tctccctgca gtcctgcagc agcagcccc
                                                                     1320
acceccaage tiggtgetga geeetggtga ggagetgagg gggatgggtt getggggeea
                                                                     1380
ggagggtete tectecagee eetgeacaet eccacecagg acageceeca geccaactag
                                                                     1440
gaaagggcca tgggcagagg gctggtagcc agtatcttcc actgccccat ctgttggcca
                                                                     1500
cctgcaggcc agtctcaacc ctcccccagg tgggcaggca cttgatggct acaaataaat
                                                                     1560
gtcccgtggc cccagcccac tctactggtg tctctctctc tgtgacttca ctaggtccgc
                                                                     1620
egeceteece agetgtgtte caaggggaat etcagaaate ceaagagtte etgeceag
                                                                     1678
```

```
<210> 3652
<211> 914
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (915)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2) ... (278)
<223> similar to gi2411475 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3652 cttcttttta atagtgaaag cccgcaggaa gcaagcagct gggagaccag agaaaatgga 60 tgatgaagac cccattatgg gtaccatcac ctcggaagaa gccctggcca gacagccccg 120 gagatcaage atetecteet ggggatgeee etecettgga agaacaaaag gageteeatt 180 atgcctccct tagtttttct gagatgaagt cgagggagcc taaggaccag gaggcccaa 240 gcaccacgga gtactcggag atcaagacaa gcaagtgagg atttgcccag agttcagtcc 300 tggctggagg agccacagcc tgtctggggg aaaggacaag tcagggacca cttgctgaag 360 cacgaagagc ccttgtggca atgttaacat taactgatgt ttaagtgctc caagcagagc 420 agaaagaaaa cagatgatgg aattagagag gtgggctcaa atctaggccc tggcactgtc 480 atcaagcaat tcactgcatc cctctgtgcc tcagtttccc attctgtaaa tcagagatca 540 tgcatgctac ctcaaaggtt gttgtgaaca ttaaagaaat caacacatgg aaatcaacca 600 acatgggtcc tggaacaggg cgttgtgctc agtgctttct ggtctctctt ccttgaatag 660 aaaggtcctg ctggcaagtt ctctcaaggc tggggatgac caggcacaaa aaacagggca 720 gcaatatgtt ggtgtcactc cccttcccaa aactcttcga agactcccta ggaaagacca 780 gcccctcagc ctggcacttg gttcatgatg tgggatctta tatccttgcc agagtcatat 840 ctttgcccac ttttacctgc aatcettgca tcatattect tgggttccag tenttcattt 900 atgagaccct aggg 914

```
<210> 3653
<211> 1895
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (25)...(1543)
<223> similar to gi563129 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3653 actgtagacc attagtccag tgcggtggaa ttcatcaacc gaaacaacag tgtggtacag 60 gtcctgcttg ctgctggggc tgatccaaac cttggagatg atttcagcag tgtttacaag 120 actgccaagg aacagggaat ccattetttg gaagteetga teaccegaga ggatgaette 180 aacaacagge tgaacaaccg cgccagttte aagggetgea cggccttgea ctatgetgtt 240 cttgctgatg actaccgcac tgtcaaggag ctgcttgatg gaggagccaa cccctgcag 300 aggaatgaaa tgggacacac accettggat tatgeeegag aaggggaagt gatgaagett 360 ctgaggactt ctgaagccaa gtaccaagag aagcagcgga agcgtgaggc tgaggagcgg 420 cgccgcttcc ccctggagca gcgactaaag gagcacatca ttggccagga gagcgccatc 480 gccacagtgg gtgctgcgat ccggaggaag gagaatggct ggtacgatga agaacaccct 540 ctggtcttcc tcttcttggg atcatctgga ataggaaaaa cagagctggc caagcagaca 600 gecaaatata tgeacaaaga tgetaaaaag ggetteatea ggetggacat gteegagtte 660 caggagcgac acgaggtggc caagtttatt gggtctccac caggctacgt tggccatgag 720 gagggtggcc agctgaccaa gaagttgaag cagtgcccca atgctgtggt gctctttgat 780 gaagtagaca aggcccatcc agatgtgctc accatcatgc tgcagctgtt tgatgagggc 840 cggctgacag atggaaaagg gaagaccatt gattgcaagg acgccatctt catcatgacc 900 tccaatgtgg ccagcgacga gatcgcacag cacgcgctgc agctgaggca ggaagctttg 960 gagatgagee gtaacegtat tgeegaaaae etgggggatg teeagataag tgacaagate 1020 accateteaa agaactteaa ggagaatgtg attegeeeta teetgaaage teaetteegg 1080 agggatgagt ttctgggacg gatcaatgag atcgtctact tcctcccctt ctgccactcg 1140 gageteatee aactegteaa caaggaacta aacttetggg ecaagagage caagcaaagg 1200

```
cacaacatca cgctgctctg ggaccgcgag gtggcagatg tgctggtcga cggctacaat
                                                                    1260
gtgcactatg gcgcccgctc catcaaacat gaggtagaac gccgtgtggg gaaccagctg
                                                                    1320
gcagcagcct atgagcagga cctgctgccc agggggctgt actttgcgca tcacggtgga
                                                                    1380
ggactcagac aagcagctac tcaaaagccc agaactgccc tcaccccagg ctgagaagcg
                                                                    1440
cctccccaag ctgcgtctgg agatcatcga caaggacagc aagactcgca gactggacat
                                                                    1500
eegggeacca etgeaccetg agaaggtgtg caacaccate tagcagecac etgeetgete
                                                                    1560
ctatgtgccc tcaccatcca ataaaggccc cttggctgtg gcatggcaaa aaaaaaaaa
                                                                    1620
agggggggcc gtttaaaaga accettgggg ggcccaaatt taaccegggc gggcaaggaa
                                                                    1680
aaatttttt ccttatgggg ggccgaataa aaaccaacct gggaattttg ggaaagaacc
                                                                    1740
cttattttgg ggggggaca aattgggcca acctccctac aaaaattaaa ggctttaggg
                                                                    1800
aaaaaaaaaa tttttaaggg gaaaaggggg aaaaacaacc ggcataccct ggcggttgga
                                                                    1860
aagttttgtt tacggagtat gatttagaaa aattt
                                                                    1895
```

```
<210> 3654
<211> 983
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (37)...(272)
<223> similar to gil710216 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3654,
ggggtcctct cgctctgtcg cccaggcggg actgcggact gcagtggcgc aatctcggct
                                                                       60
cactgoagge tetgetteet gggtteacge catteteetg ceteageete eegggtaget
                                                                      120
ggggctacag gcgctcgcca ccgcgcccgg ctaatttttt ttgtattttt ggtagagacg
                                                                      180
gggtttcgcc ttgttggccg ggatggtctc gatctcctga cctcatgatc cgcccqcctc
                                                                      240
ggcctcccaa agtgctggga ttacaggcgt gagccactgc gcccggccag aatatagcta
                                                                      300
agttttaagc aagtgttcac taggcataag aatatacatc ctggagagaa atcacagaag
                                                                      360
tgtagtatat gtggcaagaa tactacttaa aggtcaaaac ttgtggatct ataactcaaa
                                                                      420
gtgcagatat gctttacaaa tgaaatgagg gtggcagaag cttcaccaga gttcagtcac
                                                                      480
tacttgagag tttatattgg aaagaaatcg tataaatgta tgtgctagag gcttccccga
                                                                      540
ggtgtctgaa ctcactagac ctcaaaatat acatctttga caaatgtaat gtgtgtgcta
                                                                      600
agacttttta cccgaacatc caaatggaaa catcagagta ttcatactgg agaacagtct
                                                                      660
tacaaatgta acgaatgtgg taagcetttt taaaaatcaa atgggetggg tatggtgget
                                                                      720
cacacctgta atcccagcac tttgggaggc cgaggtgggt ggatcatctg atgtcaggag
                                                                      780
tttgagaccg gcctggccag catggtgaaa ccccatctct actaaaaaat acaaaaatta
                                                                      840
gctgggcagt ggtgggcacc tgtaatcccg ctacttggga ggctgaggca gaagaatcac
                                                                      900
ttgaatccag gatgtggagg ttgctgtaag ccgagattgc gccattgtac tccagcctgg
                                                                      960
gtgacaagag tgagactctg tct
                                                                      983
```

```
<210> 3655
<211> 3848
<212> DNA
```

<213> Homo sapiens

<220>

<221> misc feature

<222> (3849)...(0)

<223> similar to gil665803 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400>.3655 ttttttttt ttattctctc ataaaaatca tttattggac acatcagaaa tgacaatttt 60 ttctagtata gtagttgtat gcatctgtaa ttgcaattca gtgtaaacta catgttacaa 120 gtcactagaa atctaattag caggatgaat ttaataaaga acaagaggaa ctatcgagtc 180 taccacggac ccagccattg agtctcattg ggaggagtta aatcaaatat caaactaggt 240 gttgccctgc aacaggtttt tctgtaggcc aaggaaaaac caaggacaca cattaaacag 300 ggattaggca cccattccat aaattagggg tacacttaac tagaaaaaga ttgtaactga 360 tagaaataat ctaaataaag taagcacaaa agtaaataat tagctattta catatattcc 420 tttttgccaa aactttaatt tgttagcttt cccatcctat ctcttccctt ctatttgtta 480 ttcttgtttt ttcatggtga atttcttggc tcactgaaaa atatttagac aactaattag 540 aactictite egggteetae ettteetaaa aetttatgae aaactaatga attteaaggg 600 taacctatgt aagtctatct ctatatagaa gtaagatgca ttattattct gctatcagtc 660 atagtaatga catacagtcc catgtttttc caaacattgt ttggactact ccagaaaatt 720 aggctgtgaa tggcagcaga gtggatggat ttttcattca taacaggcac agatagtata 780 tatggagaca agcatgttta tcctgagaat gtgaatgctg tggactgcaa ctcaagatct 840 cccattactg agaatgggtc ctttgccctc tggtcactct ttttttttc aactgtcaat 900 ttttaaggcg tggtatcata gcagcatcag caaataagaa tgctgacatc atttctacca 960 agaagggete tgtgatgagt ggeageaggt accataatta aatagtgeag etgaaaagge 1020 attgagttgg tacatttctg gtgctatggc cagaatgtgt ggatttttag catcattcta 1080 ggaageetga aagatettge ceatgagtet etttgaceet tgeccattte etttetagta 1140 catatgacca tttataatta ttttattttt gctttttctc ctactggaat ataagctccg 1200 aagggcagag accatgcctg tetgtteace actgtgteec cacagtgtee tagaacataa 1260 tgttctagtg tcttgaacag tgcctggtca atagtaggtt ctcaattaaa agcttttatt 1320 aaataaacga accaaatcat taagtcccct ggtttgcctg tgtcttagag actttccaat 1380 tttatacagt ggccagggtt ctggcctatc ctaattatag agccatccta acgatcctac 1440 cctgatgtga acctgtgtag cggatatttt tgtgcttcaa tgagtagtaa aacttctcag 1500 tgatagattc attctcccaa agcttagctc tgccagagct aacgctacag gagaggtaag 1560 agggtaagaa cattctagca ggtaagctgt atgctacaaa ttcagctcat tcttccctac 1620 ctccccctac aacctcattg tttgacagaa agcttaagaa aaaaagttag caggagaatt 1680 ttctcctggc ggtgccagtc cagtaagtca ccaataacct gatcagaaaa gaaagaaaat 1740 ataactcacc tacataaaaa attaagttaa ataaaagcaa aatctgggag tgggaaccaa 1800 gtgacttggt gggctgtcta ggtcctttgt tggttagaat tgttggacat ggaagcggaa 1860 gcaggcatga cagcggagga gaggttgaaa gggaaaaggg cagagctgtg ggtgtaaaga 1920 ctgcagagga ccagcttttc tctcctcctt ctcccactcc tgccaactct gcaccccacc 1980 acggctggct gagctccttg ctgtggctct cgcaggcgga ggtaagaaca ggcagctggc 2040 gcctccacgg cacatcctta ggctattaat gctctgctgg agtagaagtc ggggactggg 2100 agcccggtgt gcagcgtgac ctgcacgttc ctgttcaggc tgaccgcagg gaagaagagg 2160 ecctecaegt tateaaatge tatgggaeet tgttgtteat egttgataaa aaatgteaag 2220 ttttttctat ttaagtcgag gaggacccca attgtggdcc cttttgtgat ccctccctca 2280 gttetgttgg tgtgcgagtt gttgtgcatg aaccagetee ggttattgte cacatacatt 2340 gcccaagett tgtcgtcttt tcctaacatc acatccttca tcacgtccat gcgagccaca 2400 ccaaaggcag gatcagggtg gttgtcatag cgatctaccg tgagctccca gtagtggatg 2460 cccttggaga agccagtctt ccctagcgcc acccggtcat catagctact acaggtcact 2520 gtcaggttgt cattggagag gatgatgtcc gagtgcgccg agccagggtc gaaagcaaac 2580 caggccacct cagacgtttg gaggaccagg gtcttgctgt acgggctgac tcctgttttg 2640 ttgaaggeet tgaeeegage gttgtatgtg etgttgaagt gaagaeeate cacagtgeae 2700

```
attgtctcct tccccacata cacctcccgg aattgaccac cgttgccatc atccagctcc
                                                                     2760
agaatgtatc catcggcggg caccgtggac agaggtggct gtttccagga caacgtagcg
                                                                     2820
ctgttgttgt gggtacaaca ttcctccagc tgtaggatag gggttgctgg gactggagag
                                                                     2880
gaagetttea ettgeaegaa ateeagetgg tggatggatt geageagagg getgttgtee
                                                                     2940
agactcaagt caaagtccgt ggtcatcctt ggagtgagtg tgcctttacc ccactgatcc
                                                                     3000
tcagtcaggt gcactcttct tatgagggcg tcagaaatct gcaaaaaacc actaggatca
                                                                     3060
ttttccttaa tcacctccaa gcagtactcc atgagacctg tggtctggcg caatttcact
                                                                     3120
gtgcagtgag agatetgate tegaaceace tteagettgt geteatgete ettgttgaeg
                                                                     3180
cgggccagca gctgggcttt tcttctgttg agggcatcga tgagggcatc acattgggcc
                                                                     3240
accagacagg cttcaaactc cacactgttc teetggatet getggaccat gttgegcage
                                                                     3300
tgtaccagaa acteettgge ttetttggee etgtetgaca gteegtteag egeetgggag
agetggetet tatgtagttt ceacatggee eccagageet tgaettegtg getggagtgt
                                                                     3420
ttgccctcct ccaagcactg gtagcacacg ggcatcttgc attgcacgca gtacatgctg
                                                                     3480
tggttctcca gctcgtggtc tgtgcaggtg gagaccttgc gtgggctcag cctccggctc
                                                                     3540
acacgaccet gggccggggg caccaggcgg tgcttggcta ggggcccccg gggcgggtgg
                                                                     3600
cagegeagge ggeaeggate geagtagaag acategeaet gttegeaeat gaeggtgget
                                                                     3660
teettgggeg cettetegea gagetggeae ttgagggeeg eggetttget etgetggtag
                                                                     3720
cggtcaatta ccccttccag tacgcgattc ttggggaagc cgcggagccc ccggtcatcc
                                                                     3780
aggatgaggc tgcggtgaca ctgggggcag gtgatacagg agttgcgggg caccggggcc
                                                                     3840
agggccgg
                                                                     3848
```

```
<210> 3656
<211> 6995
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3900)
<223> similar to gi3327058 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3656
aacagacett eetetgetag ttetacatea tecaaggete caccaagtte teggagaaac
                                                                       60 \
gttggaatgg gaaccacccg ccggcttggt tcatccaccc ttggatccaa gtcttcagct
                                                                      120.
gcaaaagaag gagctggtgc tgttgatgaa gaggatttta ttaaagcatt tgatgatgta
                                                                      180
cctgtagtac agatttattc cagccgagac cttgaggaat ccataaacaa aattagggaa
                                                                      240
atattatctg atgacaagca tgattgggag cagagagtaa atgctctaaa aaagattaga
                                                                      300
tetttaettt tggetggtge tgetgagtat gataaettet tteaacattt gegtettttg
                                                                      360
gatggageet ttaaactete tgetaaggae etgeggtete aggtagtgeg ggaggettgg
                                                                      420
tatcacgttg gggcatctgt catcagttct ggggaataag tttgaccatg gagctgaagc
                                                                      480
cattatgcca actatettta atttaattee aaacagtgge caaaattatg gecacatetg
                                                                      540
gtgttgtagc tgttaggtta attattcggc acacacacat ccctaggttg atacctgtca
                                                                      600
taacaagcaa ctgtacctct aaggctgtcg cagttagaag gcgctgtttt gaatttttag
                                                                      660
atttgctttt acaagaatgg cagacacatt cactagaacg acacatatca gtattagctg
                                                                      720
aaacaataaa gaagggaata catgatgctg attccgaagc aagaatagaa gccagaaaat
                                                                      780
gttactgggg tttccacagt cacttcagca gagaagcaga gcacttgtac cacaccttgg
                                                                      840
agtectecta ecagaaagee etgeagteee acetgaagaa eteagaeage atagtgtete
                                                                      900
tgcctcagtc agaccgctca tcttccagct ctcaagagag tctaaatcgt ccgctgtctg
                                                                      960
ccaaaagaag tcctactgga agtaccacat ctagagcttc tacagttagt accaaatctg
                                                                     1020
```

```
tgtcaacgac tgggtccctc cagcgatctc gaagtgatat tgatgtgaac gcagcagcca
                                                                     1080
gtgccaaatc caaagtetee teatettegg gcacgaegee ttteagetet gcageagett
                                                                     1140
 tgcctccagg gtcatacgca tccttagatg gtactaccac taaagcggag ggtcggatcc
                                                                     1200
gcacaagacg gcaaagctct gggagtgcca ccaacgtcgc ctctacacct gataatcggg
                                                                     1260
gccgcagtcg cgctaaagtg gtttcacagt cccagcgatc cagatctgct aatcctgctg
                                                                     1320
gtgctggcag ccggtcaagt tccccaggaa aattgttggg aagtggttat ggtggactta
                                                                     1380
ctgggggctc ctcacgaggc ccacctgtga caccgtcttc agaaaagcga agcaagattc
                                                                     1440
ccaggagcca gggatgtagc cgggaaacaa gtccaaaccg aataggatta gcacggagca
                                                                     1500
gccgtatccc tcgacccagc atgagtcagg ggtgcagccg cgataccagc cgtgagagca
                                                                     1560
gccgagatac aagccctgct cggggctttc ctccacttga tcggtttggg cttggccagc
                                                                     1620.
caggaagaat acctggttct gtgaatgcca tgagagttct gagcacaagt acagatcttg
                                                                     1680
aagctgctgt tgctgatgct ttgaagaagc ctgtgaggag gagatatgag ccgtatggga
                                                                     1740
tgtattctga cgatgatgcc aacagtgatg cctcaagtgt ttgctctgag cgctcatatg
                                                                     1800
gctccaggaa tggtggcatt ccccattatc tgcggcagac tgaggatgta gcagaagttc
                                                                     1860
tcaaccactg tgctagttca aactggtcag aaaggaaaga agggcttctg ggcctgcaga
                                                                     1920
acttactgaa gagccaaaga acactgagtc gagttgaact gaaaaggttg tgtgagatct
                                                                     1980
tcactcggat gtttgctgac cctcatagca agagagtttt cagtatgttt ttggagactc
                                                                     2040
ttgtggattt tataataatt cataaggatg atttacaaga ctggcttttt gttcttctca
                                                                     2100
cacaatttac ttaagaaaaa tggggaggca gatttacttg gatctgtgca agcaaaagtt
                                                                     2160
caaaaggctc tagatgtcac aagggactcc tttccatttg atcaacaatt taacattttg
                                                                     2220
atgagattta ttgtggatca aactcaaact ccaaacctca aggtcaaagt tgcaatcctg
                                                                     2280
aaatacattg agtototggo cagacagatg gatocaacag attttgtaaa ototagtgag
                                                                     2340
acaaggettg etgtttetag aatcataace tggacaacag aaccaaagag ttcagacgtg
                                                                     2400
agaaaggcag cacagattgt gctaatctct ctgtttgaat tgaatactcc tgaatttacc
                                                                     2460
atgttacttg gtgccttgcc aaaaacattc caggatggtg ccaccaaact cctgcacaac
                                                                     2520
cacctcaaga attccagtaa caccagtgtg ggctctccaa gcaatacgat tggccggacg
                                                                     2580
ccctcccgac acaccagcag caggaccagc cccctgacct cacccaccaa ctgttcccat
                                                                     2640
gggggtctgt ctccaagtcg gttatggggt tggagtgccg acgggttagc gaagcaccca
                                                                     2700
cctccctttt ctcagcctaa ctccatcccc accgctccct cccacaaggc tctcaggcgc
                                                                     2760
tettaetete ecageatget ggaetatgat acagagaace tgaactetga agaaatetat
                                                                     2820
agttctctac gtggagttac agaagccatt gaaaagttta gttttcgaag ccaagaagat
                                                                     2880
ctgaatgagc caattaaacg agatggcaaa aaggagtgtg atattgtgtc ccgcgatggg
                                                                     2940
ggegetgeet eccetgeeac tgagggeegg gggggtagtg aagtagaagg aggeeggaca
                                                                     3000
gctctggata acaagacete actacteaac acceageete egegegeett eeeggggeeg
                                                                     3060
cgggcgcgag actacaaccc gtacccctac tcagatgcca tcaacaccta cgacaagacc
                                                                     3120
gecetgaaag aggetgtgtt egatgaegae atggageage ttegagaegt geceategae
                                                                     3180 -
cattetgace tggtggetga cettetgaaa gagetgteea accaeaatga gegagtggag
                                                                     3240
gaacggaagg gagccctgct ggagctgctc aagatcacgc gggaagacag ccttggtgtc
                                                                     3300
tgggaggagc acttcaagac cattctgctc ctgctgctgg agacccttgg agacaaagac
                                                                     3360
cattcaattc gagcactggc gttaagagtt ttgagggaaa ttctgagaaa tcaaccagca
                                                                     3420
agatttaaaa actacgccga gctgacgatt atgaagactc tggaagccca caaagactcc
                                                                     3480
cataaggagg tggtgagagc ggctgaggag gctgcgtcca cactggccag ttccatccac
                                                                     3540
ccggagcagt gcatcaaggt gctctgcccc atcatccaga cggccgacta ccccatcaac
                                                                     3600
cttgctgcca tcaagatgca gaccaaagtc gtcgagagga tcgcaaagga gtcattgctg
                                                                     3660
cageteettg tegacateat eccaggettg etgeagggtt atgacaacae egaaagtagt
                                                                     3720
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aaacctcacc ttgcacagct cacagggagc aagatgaagc tactaaactt atacataaag
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agggcccaga ccaccaacag caacagcagc tcctcctccg atgtctccac gcacagctaa
                                                                     3900
tggcagtacc tgtctcttgt gtagacctag aagcaatcgg tggtgcctct cagagacctt
                                                                     3960
tececacece etteategge tgeccagtea gtacaaggag geccacaaat atttattaca
                                                                     4020
atcagtattt tggtcccttc cagettttct gtagaatctt actggtattg aatgtaaagg
                                                                     4080
aagcaaggcc tgtattgcag tcttcataca aaacaaaagg aataagaaca gaaaagagcc
                                                                     4140
atactgaaac atgtettgta cageetgetg agatggegaa accetgtgtg tggggtgeag
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ttttttaaaa atcagagcgc tctagccact acttggtaga aagtagcatt tttttttca
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gttaataaca tatttggggg tgggggggg gtgttacttt gtgttcatcc tccttagcct
                                                                     4320
attttcttgt gcgtatggtc tgtgtggggc ccctttcaca gctggacacc acgaaagggg
                                                                     4380
atatatettt aagttgtgtt etgagaeeta etaaaaatgg gaateaagte ttggcaagaa
                                                                     4440
```

```
cagtetgaag atggcetttt aacaaacget gggaattttg ettgteatat ecagaetgga
                                                                  4500
 ggccgactgc cctggctttc agcgtagaat tgggagtgca ccctgacagt ctccttccag
                                                                  4560
 etetecetaa tegaeteeae egaeaaggte cetaeceeag agetteeatg caaaggaatt
                                                                  4620
 cttcaagttt aaatctggac acaaaaataa gataaatgta tggcatcatt tagggatgcc
                                                                  4680
 tgagatggca gttcatgaag cacagaagat aaagaagaag tctttcatct ttactgctga
                                                                  4740
 gateettggg aacactgttg teatggggge tetgeeaaga ceeteatete tgggetacae
                                                                  4800
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                                                                  4860
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                                                                  4920
 ctcagtttaa tgtgggatta agagccaaga aaagcctaga gagactggat atcacaattt
                                                                  4980
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                                                                  5100
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                                                                  5160
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                                                                  5220
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                                                                  5280
; acttetattg tetettactg ttgtattaga teetataaat tgaactgatt tttecataag
                                                                  5340
 gaaaatgctt cttttgagat taattctaat aacgtatttg ctattgcagt gcagagccca
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 ctgcaactgc taggactgaa agcagaggct gggtgccaga gcacgtgatt cttaacatca
                                                                  5460
 tttccacaga cccctctgcc ctgaccctct gcattggatg caggaagctg ggaaagactg
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                                                                  5580
 5640
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 gagggacgcg tttcaagggg ttgggtatta ctgacgagct ttggctcaaa atatagcagg
                                                                  5760
 accaggictt tigitgataa giacigtiig titattaata igicattaat ggiatticti
                                                                  5820
 ttttacactc tacaagtgaa ttagggagtc tcttgttgac ccctttgttg caggaatggg
                                                                 5880
 cgtcgggcta ggttatccat gagtttcttt attcctaatg cagttagaaa gacctttctc
                                                                  5940
 cttgagetet ttgaetecca gaaggtaece cagteeccag tgtaettaga aaggateteg
                                                                  6000
 aacattgctg gacgtcctca tagtactcac aaagggctag ccttgaatgt cactcgccca
                                                                 6060
gtcttcagtc tcctgactta gagatacaat cacgtcacag gtctcttggc ctcaatctga
                                                                 6120
aaactgctgc cgccgcgccg aggagactcg catgccgcca ccacctcact gggagggcgc
                                                                 6180
6240
ceetgeaggg eccetgitee aatgaaaaac agaacacaaa agagcagage acctaagcet
                                                                 6300
gtctctgcct ccctgtctac ctgactggcc agggcccaag acccccgctg ctccactgcg
                                                                 6360
gggctgggcg ggctgactcc ctgcttcctc caagctgctg cctcccctgc agccagggtc
                                                                 6420
tgggcagggt gcagccggtc ctcggggcac gcagcttcct tcaagtacac tgtgtgtgct
                                                                 6480
teceggacet geggegatge caegggeetg cettttetat gegeeteact agettaceae
                                                                 6540
cctgtgcagg taatgcaact gactttgtct catcagtctt tttctttccc tgccaccctt
                                                                 6600
tatttatcaa gcgtaatgtt acactttaaa ggacagcaaa taagaacttt gtagaatccc
                                                                 6660
accaggactt tgctaacaat aatgtttgga aataaagaag tgctctgaaa aaatatcagc
                                                                 6720
caccaaaata gttatgttgg cactgtgttc acacgcatgg tccccacacc cccaggttgg
                                                                 6780
6840
totgtattta tatottattt gtttcacttt caagggtatc atggcaaatg tacagatttt
                                                                 6900
tttgttaata atgtgctagg atttgctaaa aaagaaaaaa aaaaaaccct tttgagtttg
                                                                 6960 -
ccctaaaata aatgagactt aattcaaaaa aaaaa
                                                                 6995
```

```
<210> 3657
<211> 1155
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1071)...(481)
<223> similar to gil665823 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 3657
ttttgctcta tgaagaaatt cactttaaca cttataactg taagactttg catacattac
                                                                       60
aacagtgcat tagtgataca agttgtaaaa tacgtttcca ttcctttgga ttttgcatat
                                                                      120
gatggttttg catcagtcac tgcaggtaga ttgagcaagc tttttgtgtt tgtttttta
                                                                      180
aacatgcatt caactagata tgattcagaa tagattaata ctcccttttt atcattacag
                                                                      240
ttagctaaaa aattgccagg gcagtccaca aaacagaatt tgctttaaga ccaacccaca
                                                                      300
gagtcagctg gagactaacg gcgctggggc ctgctgggcc gggatatagt cqtqtttaqc
                                                                      360
taagtgtcga gagcattaag aagaaagtcc tggttggagg cgcaaggcct gcagcaccag
                                                                      420
ctgtggaatc cccaataatg tgactgcaca gctccgtcct caaacatttg caggtgatca
                                                                      480
ccactgaggg ggcacatagc tgtaagtggg cgttccctgg ggcccggtac gtgggcacag
                                                                      540
tgaccgggtg gggggcgaca ggagttgggg agtgagcagt cagcagggta cctgctgaca
                                                                      600
tggccatggt ggtcccagcc accatgccca tggtgacccc gttgcctcta ggaggggga
                                                                      660
tgggagcagg gtacaccgtt gcaggcatgc cgttgggctg caccaccgtg gtgtggtgga
                                                                      720
tgacgtgagg aggtgctgca tacagcggct gtgtgtagta cgtgccttgc tgtgcatacg
                                                                      780.
ggctctgctg ggggtaggca cttcgcacag ggtacacggc agtctggtag gggttcgggg
                                                                      840
aggaggagta cggtggcaca gccccgctgg tgggggaaca ggacactttg taaggtgtgc
                                                                      900
caggagtgta acctgtttgg aaggtaggat tegetecagg atacatgtta ggagaatagg
                                                                      960
caggagetge tgctgcatag eccatgggaa aaccagetgg ataaccaatt cetttggcat
                                                                     1020
ttgcataggg aaccccagaa gatccaggac tataaacagg attcatgatt tcaaaaacct
                                                                     1080
ccgagccccg cgtctccgcc gcctcccgga cgacgaactc ccgctcgctc ggctccgctt
                                                                     1140
ggcccggcca cgaaa
                                                                     1155
```

```
<210> 3658
<211> 1841
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1843)...(513)
<223> similar to gi3415109 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

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<400> 3658
gagaaccaga atgottatat tttattagta tocaagactg gggagaggga tggggtggga
                                                                       60
gagatcaaga attggggagc agatgggagg cgctacctca ctcaggagac acgagttctt
                                                                      120
atccaagttc aaggtgaaag aagtgagggc aggaagagaa atctccctgc tagcaacagc
                                                                      180
gactcaggga gaaactctgg gcccatagct agctggaggc agggtgacat tgctccacc
                                                                      240
aatgggccat cttcttagct acacetttgt agetgtggtg ccaggcagaa gaaccacetg
                                                                      300
gaaactgagc taaggcaggt teettettee aacagaagae acagetggge agggaetgtg
                                                                      360
cagactcaac agggccaggc cagctagtgg ccagtcagtg ttcatgtctc tcaccagtgc
                                                                      420
ctggagggtc cccagccaag gaaagaactg gtcagttcct gccagcagct tgagctggaa
                                                                      480
tgccctggga gggtcagtag agggtggtca cttgaggagc ttcacagaga ggcggatgtc
                                                                      540
aacatcgcag aggaagatgt ccatgaggtc atggcctgcc tcctgtgcta tctgggagat
                                                                      600
cacgtggccc ttcggaccaa tcaggagttt cacataagat tctttgggca ccagaagctt
```

```
ctgttggata accagetece cacetggtee tteeteceae actgetgtet tetgetgtae
                                                                      720
attgtaaggc acctcctggg gcaggtgttc taggagcttc tctcggataa tgttggcaca
                                                                      780
gatetettet ggtgtetgge tagtgaggae tgeactgtgg tacteceagg geeetggetg
                                                                      840
ggcctgtgtc agaaggtatt gctttagtgt tttcacatcc tcctggctta gggctgacaa
                                                                      900
catgaagatc teettgaagt ggggecagec aateetetga ggattteeca cagattgtgt
                                                                      960
gtttgggtcc ttaactgctg ggctggggca atgggtgcca gggtgtgagt ggaaggcctg
                                                                     1020
cctcatcttg agetttttgc cattgaccac accttcagtg agggctgccg tgagctccag
                                                                     1080
gagaactgac ttctgcttca aacaatctac cttgttcatg accaggacac tagggatctg
                                                                     1140
ggagtacttg gtcaagcacc tgagcaactg ggggctgagc tggttccgtg tccacttgtc
                                                                     1200
tgagacatcc acaagaacca caacaagatc agcagattcc atgctcttcc atggatcttc
                                                                     1260
caacaaagag ageteeaggt gatgeetett etgtttaeca ggaetgataa tgeeaggtgt
                                                                     1320
gtcaagtaga atcacctggg tctccttctc tgtgatgacc cccagagctt ggcagcgagt
                                                                     1380
agtatgcacc ttcctggaaa cagggaacac ctttcggccc agtagctggt tggagagtgt
                                                                     1440
tgacttccct gcattcgggg ctcccaggag gaccactcgt aggacccggg aattctcagg
                                                                     1500
catatcaggg tgatggacca agaggacatc ctgctcatct ctgttcatgg acaccgcggg
                                                                     1560
gacgcaagga gtcaccgaac tgtcgggctg agagaatccg aggaagtggt ccagggcaga
                                                                     1620
gccctggcca ttactgcgag aagccgaggc caagcgggga ccagagaaag cggacccgc
                                                                     1680
gacgcaggac acgcacctcc gttggaagcc taagagtgag gaaaaaggga tcacccgctc
                                                                     1740
cetegegaca tgagggeeca eetgeeagae tettaacace gattgaacaa geetageece
                                                                     1800
gegecagetg ggggcageca tectegtgee aagettggeg t
                                                                     1841
```

```
<210> 3659
<211> 1917
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1069)
<223> similar to gi4583418 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3659
atggcgctga gtgaacccat cctgccgtcc ttttccactt tcgccagccc gtgccgcgag
                                                                       60
cgcggcctgc aggagcgctg gccgcgcgcc gaacccgagt ccggcggcac cgacgacgac
                                                                      120
ctcaacagcg tgctggactt catcctgtcc atggggctgg atggcctggg cgccgaggcc
                                                                      180
geeceggage egeegeegee geeceegeeg eetgegttet attaceeega acceggegeg
                                                                      240
cccccgccct acagegeccc cgcgggtggc ctggtgtetg agetgetgeg accegagetg
                                                                      300
gatgegeege eggggeeege aetgeaegge egetttetge tggegeegee eggeegeetg
                                                                      360
gtcaaggccg agccccctga agcggacggc ggcggcggct acggctgcgc ccccgggggt
                                                                      420
gaaccggtgg accgcgcgc ctcaagcgcg agggcgcccc gggcccggcg gcttcgtgca
                                                                      480
tgcgaggtcc cgggggccgc cccccgccgc cgcccgacac accgccgctc agccccgacg
                                                                      540
geocegegeg cetgecegeg ceeggteege gegeeteett eeegeegeet tteggtggee
                                                                      600
ctggtttegg egegeeeggg eeeggeetge attacgegee geetgegeee eeageetteg
                                                                      660
gtetettega egaegeggee geegeegegg eageeetggg eetggegeee eeegeegeee
                                                                      720
geggteteet caegeegeet gegteeeege tggagetget ggaggeeaag ccaaagegeg
                                                                      780
geogeogete tiggeocoge adaegedeeg codeteded tetgedgeta egegggetge
                                                                      840
ggcaagacct acaccaagag ttcgcatctg aaggcgcatc tgcgcacgca cacaggtgag
                                                                      900
aagccctacc actgcaactg ggacggctgc ggctggaagt ttgcgcgctc agacgaqctc
                                                                      960
acgcgccact accgaaagca cacgggccac cggccattcc agagccatct gtgcgatcgt
                                                                     1020
```

```
gcettetege geteegatea eetggegetg cacatgaaae ggeacatgta geegggaege
                                                                     1080
eccegeceae etgegegeg geogtgggeg ggtteecaeg egeegggege ggeeceetee
                                                                     1140
caaactgtga ctggtattta ttggacccag agaaccgggc cgggcacagc gtggctacag
                                                                     1200
agggtetece tegatgaega egaegaegae gecaecaece cagececegt etgtgaetga
                                                                     1260
aggcccggtg ggaaaagacc acgatectec ttgacgagtt ttgtttttca aaatggtgca
                                                                     1320
ataatttaag tggcatcttc tctcccaccg ggtctacact agaggatcga ggcttgtgat
                                                                     1380
gccttgtgag aaataagggc cttaatttgt actgtctgcg gcatttttta taatattgta
                                                                     1440
tatagtgact gacaaatatt gtattactgt acatagagag acaggtgggc atttttgggc
                                                                     1500
tacctggttc gtttttataa gattttgctg ggttggtttt ttttttaatt aaaaagtttt
                                                                     1560
gcatctttta aaaaaaatca cagcactggt ctggttgctt ggaactgggg ccttggggca
                                                                     1620
cttgggagga ggggggagcg gaaagtttga tggagggcag ccccactaa agcatcgtgt
                                                                     1680
gcagtgggtc ctgcgtctgc cagcaccggg actgccagct gctgtgcctg cctgccagga
                                                                     1740
acctgtgggt ttttctgtaa atttagacac tgcattttag gactgaggga gggttatttt
                                                                     1800
aaggttgttc tttgagccat aaattgcctc tttgccccac atgctgggga aagtgctggt
                                                                     1860
cccactgacg tggcctcctc tacgttgaaa aaaataaaac tacttacctc ttcctgg
                                                                     1917
```

```
<400> 3660
  ttttttttta aaaaggtttt gcatttcata tttattatca gtgcttcaat atagaatgtt
                                                                         60
  ttgtaatgat tagcaacatt gtaaaacacc accaggtttt tecaacacta actgetagte
                                                                        120
  ttttccagta aatattttt ccccagacaa aataaccaaa cctaacacaa tttcaagaga
                                                                        180
  tggtgatacc atcagcataa taacccaaat tacaaaaatg gcaatactta aaatcatgca
                                                                        240
  tattatttca ccatttcata aaacttattt taaaatttct acaaactttc ccagtgtaaa
                                                                        300
  agacteetea aaagetgeat gataacatta aactacaaaa tteaetttgg aaaagtaggg
                                                                        360
  agttattttt ctaattttgg ctttaagatt tttttttta aatgggttaa aagatacggt
                                                                        420
  gaggagtgtg ttgagagagg tggagaaaag gagcttccag tcaatgcatt caccatatct
                                                                        480
  gaaaatactt cagttataca aagggaacac ttcgagagta aggatatatt ataaataagt
                                                                        540
ctctcagcaa gatgaacgga tgaacagttc aattgcaccc acaggagaga ggtcttcttg
                                                                        600
  gagaatgett gtttatagaa tettetgtaa aatagagttg getaetteta atgatteate
                                                                        660
  ttgtactaaa acaatatcat aagagtccat gtacttttct aaaagctcat ccactctatc
                                                                        720
  attragatat ccaattttca gaatgtgctc aacattggcc actccatctg ccattcttaa
                                                                        780
  gteteettgg gagteteeea aggagaatta tgttaetatt gtettttagt tgattgaaat
                                                                        840
  attetgtatt ceteaaggea eeateatgtt tgttaaatae atgaattagt teteetttaa
                                                                        900
  atcctttgag caccccctat gaaaaatata aatcttttga acaggcttta aaaattctat
                                                                        960
  ttgttggatt ttcatatttt ggagctctta attgatgtca ctattatttc atcatatttg
                                                                       1020
```

```
taaatacatc tttgatacta gagateteaa ageaettaag tecateacat teaceatage 1080 taagaaggge teggagaagt aaatgattt ttagatacta ttttaaatgg taaaacaaag 1140 geegggegea ggggeteee cetgtaatee cageeetttg gaaggeeaag gaggeeagat 1200 ceetcaaggt caggagttea aaaccaaact ggeeagtega egeggeegeg aattecagat 1260 etgttttegt gntnetgann eegeeatgge tt 1292
```

```
<210> 3661
<211> 2092
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (428)...(685)
<223> similar to gi407992 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3661 ttgcctgttt ctcttctcc caaagagctg ggattaccgg tgtgagcgag cgcactcctc 60 cccccaaatt gtttaccttt acccgaagtt ggtatgcatt gacttacctg tggacaacag 120 tgatttttgt ctcctgtcct tacttctctc tgtctccaac tctcagggac tcattcatca 180 ectetecety caccecacce cetgaccegt getagtttgg tatetatgee tgtagetttg 240 ctttggggca tcatctgaat ctcatactgc acggcctttc agatctggct tcctqcactc 300 aatgtcatgc acgtctctta gtgccgtgtt cccttaatgc tgagtcatgc tccattgtat 360 ggatggacca catgactgat ttgcctcctg tccttagtcc tctcagcctc caactctcct 420 tectgeagge attgatgttg aacaagtgte tgtegteate aactttgate ttecegtga 480 caaggacggg aatcctgaca atgagaccta cctgcaccgg atcgggcgca cgggccgctt 540 tggcaagagg ggcctggcaa gtgaacatgg tggacagcaa gcacagcatg aacatcctga 600 acagaatcca ggagcatttt aataagaaga tagaaagatt ggacacagat gatttggacg 660 agattgagaa aatagccaac tgagaagctc caccagccac tgatgccagc cctggcactg 720 cccctgcaca ggagacaagt gcatttaggg cacaggcccc gacatcaccc caaggacaac 780 ggcagaagta gagagaaact acctacctca cttcaaatta tgtttggact tgacaaaaat 840 aggtgcaaat gatggggggc aatagaagaa aaaatttgca ttttggaaaa ttgggtcctt 900 tececaetti titaaageea eatteeecea tettiataat aatetggtea eagtggtagt 960 cgctggcccc aggaccccct cctgattttg gctaggcatc gtggaaccag ctccagcccc 1020 tgaagaaacg atagatgtgc aggttgtgcg gaagaggctg agtggaaaat ggtgtgagcc 1080 ccaccgctgt gcatcgaatg agggaagtgg cagcagagag gccagagctg ccccctctct 1140 gtetetteaa tggaccette acaagtgttt etcetgeeet tggggetgte tteettetee 1200 tgaaatccag agactttctt gctcatccct tctccctttc acttctgttc tctgctgcag 1260 aaagcagact tgcatatccc tgatgagcag ctcggctact tttgtaaact tcagatttgg 1320 agagaaacac gaaagtctga atcctgaccc cttgagagag agtgatctgg cgagggccga 1380 tgaagggget gggeetggte ttgeettete tteteteggt tgeteeetet geetaggeee 1440 ctggtactca gtcacggcag ccaggagacc ccaggtgagt ttctgagcgc atacgtagtt 1500 ggttcttacc cccaggtgtc acacggggcc gagagctgag caagaatttg gaatggaagt 1560 tatgaccaag ggaattatgc tgttcattta taatagtgga cattatggag agctctgatt 1620 cctacataat atgaataagg atggataggc cgggcgtggt ggctcatgcc tataatccca 1680 gcacgttggg aggctgaggc gggcggatcg gttgagctca ggcgttcggg accagcctgg 1740 ccaacatgat gaaaccccgt ctctaccaaa aatagaaaaa aatatagccg ggcctggtgg 1800 cgcacgcctg tagtcccagc tactcgggag gctgaggtag gaggatcgct tgagcctggg 1860 tagaggetge tgtgagetga aatggegeea etgeaeteea geetgggtaa eagagegaga 1920

```
ccccgactca ataaataaat aaggatggat aaattgtagc gtatgcacca ttcattatgc 1980
taagacattt taaagtaatt atgagaaacg ctctactaat gatttgtttt tatttgtatt 2040
tttctgctta ttagacgaaa tatatactca ttttaaaaag gaaaaaaaaa aa 2092
```

```
<210> 3662
<211> 920
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (905)...(332)
<223> similar to gi4884206 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3662
tttttttttt tgagaaaagc cgttgaggtc ctctcaaatc tgcatgtgag caagtaggtc
tacaacaggc aaacatactg cttcccgact tctgaaaagt caaggaatcc taagtaatct
                                                                      120
agatgaaaaa gtgactcctt ggtttcttca cattcccctc caagagccca gtgagccatc
                                                                      180
ageteetgge cageaacaca cetgatacaa aatgggagaa gtgtataaat tattatgttg
                                                                      240
ataagcaaga taagtgccaa agggtagata agagtgaaag cattgggaag cctggcagag
                                                                      300
tgcagtcagc aggtcagttc ctggcggttc attgagcagc ttggcccaaa gatgtaagtg
                                                                      360
aagtccctcc tggtggaggg atgagagcag ctccagttac tcggccttca tgacacagga
                                                                      420
agttgaaggt ggcacaggca ttgggcgtgt cctgcacttc cacagcaatg ccccgctgcc
                                                                      480
teatggettg aageacetgg gaetgeagee teteggteeg gteteeagte eccaceacea
                                                                      540
cgatctctat ccggggctcc agcaaccaga agagggaaaa gctgtcttcg gtgatgtcct
                                                                      600
ggtgggatcc cacgttccac tgcaccaccg agtgcgggag cagagcgcag gggccgagca
                                                                      660
egeggtttee gtttateatg aageegegge tgttgtaget gtegatgtae attgeetgag
                                                                      720
eggeetegeg ttgeageaga gagatgegeg teegetgata cagetegtea teegeeggeg
                                                                      780
agageegatg ceetegeege ggggeeeagg gaageteaac gggeggaeag egeagegagg
                                                                      840
gtcgcgctcg gtacaagcta cgtagcgcga gagcggtggc catggctgac caacgcgcgg
                                                                      900
cgaagtcgtc accggcgccg
                                                                      920.
```

```
<210> 3663
<211> 1189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1178)...(122)
<223> similar to gi899493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3663 cggtcctaca gtagagatgg gcagtctgta gccgagccag gcatttcgtt aaaggcagga 60 tetggteegg gaggtetggg atetetggtt atatgggaet tetgaeetet gggeaeetae 120 tgeagetgtg getgaggeea agaaatgtga ggggeeteea tecaetgeat tgagtagega 180 eccegacgtg gggtteaatg tggagegggg aggggetget geggeagetg caggageega 240 ggtgccaggc cttgttcttc tcatgccggc atccctgctt gcaggtgtga agggggcagg 300 aatcagcgag gtgtcctggg ctgagtcccg ggagtgggaa gaggtggcag gaaggggatc 360 tgaggaggag aacaggggtc ctggtggtct gtgcttcttc'ccagacacgg gagctgtaga 420 ggggacetet geageagatg etagggggge caetaggece aggeagtett gggaettggg 480 tetgteetge tgtgeateca tagtgggtge tttagaaacg ggaggeecac cegaageece 540 tgttgcaagt gaggacaaag tgtgggaagg ccgtgagggt ctgcagtccg ggatggcctt 600 gtcctcaacg tgcagtgcac tgttgatgcg ctggaatgcc gtctcttttt ccaggtgcag 660 gtcttcagcc gtgacccggt accccagctc taagggaggt ggcagcatca aaggctcccc 720 tegeetgegt ggeageaggg gaatettgeg tetaegggge etagagteet gggatetggg 780 ggagccaccc gttggggcga ttgtctgccc tggtgctgta tctgccccct tttcacaccg 840 tgtgtgaccc gaagagacag cctgaggcct gtcctcactc actgtctttg agtaactgag 900 ggtcagctgg cagcgggatg aggctggccc cctcctctgc tttagccccg gcaagcctcc 960 cgtggagctg taggagctgg agatggcatt tcgtttggtg ttcgagctcg tccaggatgt 1020 ctgggatgtg tggttatatc tgatttctga gctctgggcg tggaggtctg tctgcagagg 1080 ecegggeetg ggeacaaagg gagagggee tecattgtee egeaggggee aaaatgeaga 1140 ccgtgcatcc ccggtgaacc tcgggaccgt tctctgatca tcaggattt 1189

```
<210> 3664
<211> 1159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (41)...(425)
<223> similar to gi5734705 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3664
accggaccgg aatttccggg tgagaagatt tcgtcttgcc tcccccatca cgtcccctga
                                                                       60
caccgacace ceattgetee cacagtetee ceagteteea etttggteee cagegetgte
                                                                      120
tgcccgagga tttgcctgaa ggctgccccc aactetgcac ccgccccccg agggccaccg
                                                                      180
aggaccatga ctaagacaga teetgeeeeg atggeeeege caceeegagg agaggaggaa
                                                                      240
gaagaggagg aggaggatga acceptocce gaggececca gececaceca ggagegeegg
                                                                      300
cagaageetg ttgtgcacee eteggcacet geceeetee etaaggaeta egettteace
                                                                      360
ttcttcgatc ccaatgaccc ggcgtgccag gagatcctgt ttgaccctca gaccaccatc
                                                                      420
cccgagctgt ttgccattgt gcgccagtgg gtgccccaag tccagcacaa gatagacgtc
                                                                      480
atoggcaatg agattotgcg cogaggotgc catgtgaacg atogtgacgg gotgaccgac
                                                                      540
atgacactgc tecactatgc agtgcaaagc tggggcccac ggagtcgggg accccgcggc
                                                                      600
ageogtgege etetegeage agetgetgge getgggegea gatgtgaege tgegeateeg
                                                                      660
ctggaccaac atgaacgcgc ttcactacgc ggcctatttt gatgtgcccg acctcgtgcg
                                                                      720
tgtgctgctg aagggtgcga ggccgcgagt ggtgaactcc acgtgcagtg acttcaacca
                                                                      780
cggctcagcc ctgcacatcg ctgcttccag cctgtgcctg ggcgccgcca aatgtttgct
                                                                      840
ggagcacggc gccaaccctg cgctgaggaa tcgaaaagga caggtgccgg cggaggtggt
                                                                      900
```

```
cccagatcctatggacatgtccctggacaaggcagaggcggcactggtggccaaggagct960gcggacgcttctggaagaggcagtgccactatcttgcgccctccccaagggtcacgctac1020ccaactatgacaacgtcccagggcaatcttcatgcttagcgcactgcgttgcgcctggga1080gaccgcgtgctgctggatggccagaaggtcagggctgggatgtgtgtttgcatggtggg1140tgggggtgggactcagccc1159
```

```
<210> 3665
<211> 5530
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4500)
<223> similar to gi1504040 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3665 ageeggeegt ggtggeteeg tgegteegag egteegteeg egeegtegge catggeeaag 60 egeteeaggg geeeegggeg eegetgeetg ttggegeteg tgetgttetg egeetggggg 120 acgetggeeg tggtggeeea gaageeggge geagggtgte egageegetg eetgtgette 180 cgcaccaccg tgcgctgcat gcatctgctg ctggaggccg tgcccgccgt ggcgccgcag 240 acctccatcc tagatcttcg ctttaacaga atcagagaga tccaacctgg ggcattcagg 300 cggctgagga acttgaacac attgcttctc aataataatc agatcaagag gatacctagt 360 ggagcatttg aagacttgga aaatttaaaa tatctctatc tgtacaagaa tgagatccag 420 tcaattgaca ggcaagcatt taagggactt gcctctctag agcaactata cctgcacttt 480 aatcagatag aaactttgga cccagattcg ttccagcatc tcccgaagct cgagaggcta 540 tttttgcata acaaccggat tacacattta gttccaggga catttaatca cttggaatct 600 atgaagagat tgcgactgga ctcaaacaca cttcactgcg actgtgaaat cctgtggttg 660 geggatttge tgaaaaceta egeggagteg gggaacgege aggeagegge catetgtgaa 720 tateccagae geatecaggg aegeteagtg geaaceatea eeceggaaga getgaaetgt 780 gaaaggcccc ggatcacctc cgagccccag gacgcagatg tgacctcggg gaacaccgtg 840 tacttcacct gcagagccga aggcaacccc aagcctgaga tcatctggct gcgaaacaat 900 aatgagetga geatgaagae agatteeege etaaaettge tggaegatgg gaecetgatg 960 atccagaaca cacaggagac agaccagggt atctaccagt gcatggcaaa gaacgtggcc 1020 ggagaggtga agacgcaaga ggtgaccctc aggtacttcg ggtctccagc tcgacccact 1080 tttgtaatcc agccacagaa tacagaggtg ctggttgggg agagcgtcac gctggagtgc 1140 agegecacag gecaecece geogeggate teetggaega gaggtgaeeg caeacecttg 1200 ccagttgacc cgcgggtgaa catcacgcct tctggcgggc tttacataca gaacgtcgta 1260 cagggggaca gcggagagta tgcgtgctct gcgaccaaca acattgacag cgtccatgcc 1320 accgetttea teategteea ggetetteet eagtteactg tgaegeetea ggaeagagte 1380 gttattgagg gccagaccgt ggatttccag tgtgaagcca agggcaaccc gccgccgtc 1440 ategeetgga ccaagggagg gageeagete teegtggace ggeggeaeet ggteetgtea 1500 tcgggaacac ttagaatctc tggtgttgcc ctccacgacc agggccagta cgaatgccag 1560 gctgtcaaca tcatcggctc ccagaaggtc gtggcccacc tgactgtgca gcccagagtc 1620 accccagtgt ttgccagcat tcccagcgac acaacagtgg aggtgggcgc caatgtgcag 1680 ctcccgtgca gctcccaggg cgagcccgag ccagccatca cctggaacaa ggatggggtt 1740 caggtgacag aaagtggaaa atttcacatc agccctgaag gattcttgac catcaatgac 1800 gttggccctg cagacgcagg tcgctatgag tgtgtggccc ggaacaccat tgggtcggcc 1860 teggtgagea tggtgeteag tgtgaaegtt eetgaegtea gtegaaatgg agateegttt 1920

```
gtagetacet ceategtgga agegattgeg actgttgaca gagetataaa etcaaceega
                                                                    1980
acacattigt tigacagoog tootogitot coaaatgatt igoiggoott gitooggiat
                                                                    2040
ccgagggatc cttacacagt tgaacaggca cgggcgggag aaatctttga acggacattg
                                                                    2100
cageteatte aggageatgt acageatgge ttgatggteg aceteaaegg aacaagttae
                                                                    2160
cactacaacg acctggtgtc tccacagtac ctgaacctca tcgcaaacct gtcgggctgt
                                                                    2220
acegeceace ggegegtgaa caactgeteg gacatgtget tecaceagaa gtaceggaeg
                                                                    2280
cacgacggca cctgtaacaa cctgcagcac cccatgtggg gcgcctcgct gaccgccttc
                                                                    2340
gagcgcctgc tgaaatccgt gtacgagaat ggcttcaaca cccctcgggg catcaacccc
                                                                    2400
caccgactgt acaacgggca cgcccttccc atgccgcgcc tggtgtccac caccctgatc
                                                                    2460
gggacggaga ccgtcacacc cgacgagcag ttcacccaca tgctgatgca gtggggccag
                                                                    2520
tteetggace aegacetega etecaeggtg gtggeeetga gecaggeaeg etteteegae
                                                                    2580
ggacagcact gcagcaacgt gtgcagcaac gacccccct gcttctctgt catgatcccc
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cccaatgact cccgggccag gagcggggcc cgctgcatgt tcttcgtgcg ctccagccct
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gtgtgcggca gcggcatgac ttcgctgctc atgaactccg tgtacccgcg ggagcagatc
                                                                    2760
aaccagetca ectectacat egacgeatee aacgtgtacg ggageaegga geatgaggee
                                                                    2820
cgcagcatcc gcgacctggc cagccaccgc ggcctgctgc ggcagggcat cgtgcagcgg
                                                                    2880
teegggaage egetgeteee ettegeeace gggeegeeea eggagtgeat gegggaegag
                                                                    2940
aacgagagcc ccatcccctg cttcctggcc ggggaccacc gcgccaacga gcagctgggc
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ctgaccagca tgcacacgct gtggttccgc gagcacaacc gcattgccac ggagctgctc
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aagetgaace egeactggga eggegacace atetactatg agaccaggaa gatégtgggt
                                                                    3120
gcggagatcc agcacatcac ctaccagcac tggctcccga agatcctggg ggaggtgggc
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gccttcgcca ccggcggcct tcaggtttgg ccacacgctt gtcaacccac tgcttttacc
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eggettggae gagaacttee ageceattge acaagateac etececette acaaagettt
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gctgttctcc atggcacaca cggtggctct ggacctggcg gccatcaaca tccagcgggg
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                                                                    4020
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                                                                    4080
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                                                                    4200
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                                                                    4260
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                                                                    4320
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                                                                    4440
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                                                                    4680
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                                                                    4800
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                                                                    4860
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                                                                    4920
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                                                                    4980
ccatcacaag ctatgtttaa aaagaaaatt ggtgtttggc aaacggaaca gaacctttga
                                                                    5040
5100
ggaacetetg aacteeteet teetetggge tetetgtaae attteaceae acgteageat
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ctaatcccaa gacaaacatt cccgctgctc gaagcagctg tatagcctgt gactctccgt
                                                                    5220
gtgtcagctc cttccacacc tgattagaac attcataagc cacatttaga aacaggtttg
                                                                    5280
ctttcagctg tcacttgcac acatactgcc tagttgtgaa ccaaatgtga aaaaacctcc
                                                                    5340
```

```
ttcatcccat tgtgtatctg atacctgccg agggccaagg gtgtgtgttg acaacgccgc 5400 tcccagccgg ccctggttgc gtccacgtcc tgaacaagag ccgcttccgg atggctcttc 5460 ccaagggagg aggagctcaa gtgtcgggaa ctgtctaact tcaggttgtg tgagtgcgtt 5520 aaaaaaaaaa
```

```
<210> 3666
<211> 4254
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4255)...(2061)
<223> similar to gi3882261 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3666 ttttttttt ttcttgcttt attaggttta ttataaggag cagtgatgag atctttatca 60 gteeteacta caaagettte ateteeagee tteteeatag etetgtggag ggeagagagt 120 tgagggaagg aagaatggag cttgggagca tgggatcatg tatgtatacc aggaaagaaa 180 acacacattc tttattctat tgcttcaaag acagtttgtg agaatggaag ataacaagca 240 cagetggcca ggaaggcagg gcacacatgg caggtcaagt teetgetate cagggaggtg 300 gcccagaget tecetgetge teetggagga agcagagtee aagetggeee agatgaggee 360 ccgggcagca ctgcttctgt gtgggtatgg ccagtcggga cgtggcgcca cacactgctc 420 etecgaacte tggtgaaggg etgeceagee teacaggeet gagcagagte teccacatet 480 gcgaatgggg ccaatggcac tcactgtctc ttcaggcccc cacggacggc atgcctgggg 540 aagectagte tacttaccat cageacgttg atetgteaca cageatggag ceatagttta 600 caaaggacca cggcaggtca aggacaggcc actaaaactg ttggtgctgg gcaccatcac 660 ccacceteae caccateaaa gacaetggtg cagtgagaet tegagtetge aaaaacceeg 720 gggaggacag gaggcagggc cactetecet gtgtgtcate agectgcagt geetgaaact 780 ccagectgtg caeetetgge aggatgeece acaetgetee acaggtttgg eggtgagtta 840 tttttaaacc agcgtcctgc tgttcttgcc ccccgcgtcc cctctgctgt gcctaaacac 900 ctctcaggaa cacttggcag cacgccattg tcagttccag gtccactcat cccctgcgtg 960 ttgccgggac ccaccttcct gcgctatccc agcacaactc tccaaccaca ccattgctga 1020 acaaagctgg ggagtgacgg ccagggcagg ctgtaaggca agtgaatgga aactggctgg 1080 aaaaagagaa agggcccaga gcacaaaatc gccacgcaca aagactaagc cagcctgcct 1140 gagtgtetgg tgagegaaga eggageagge acetetgtgg gaacatgtat etagggatea 1200 cgcatacccc agacagggca ggcccatcct caggagetgc agtcacactc agcccggcct 1260 gaggcaaggg atgcagggcc ttgcctaggc agagaatgat gctctccgag gcatctaggc 1320 atggagtgta tggccaaaga gggtctattt acaacatacc tgacaatcaa ctagcactgt 1380 attectagaa etgagaceee 'ttgettetea tettacettg ettaaatatt agttatteee 1440 agagtcaggg aagtgggaga gaaagcctgg gtagggcagt gagggaagtg ataaatggtg 1500 agaaagaaaa ggagactgaa aactaacagg gcggctaccg aggggtgcag ggcacagtta 1560 ccatggagac gtaaaacact acacagaatg cgagccatcg ggtccatgcg gccagaagct 1620 tgagtgctgt teteteatgg aacteteeag tgageeatge tgageggtee ttgtgaagte 1680 atgtacttaa tagaaaagcc cttgatgaac aaccccatgg ttacaaacac ttgtgacaag 1740 tttccttgtt caggtgactg gtgtgcaaag gcaagatggt gcacatcctc ctgaccaagc 1800 aggtactgaa ttctctggaa ttgcccacaa cataatggta taaggtataa ctaatctctt 1860 ttcccattaa aaagctggca atgccagacc atgagtctaa ttaattcaga gttgttccag 1920 ggcacaagat agccaagtaa tgtccaaatg gggagccttg tggttggtgg cagccaggat 1980

```
tectaaggee aaggtgetee tteacetete tgggagagee aagetgteea teegetggat
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ccccaggatg ctgggctcaa gtgtcagctg ggtttacctc tttgggaaca gaagtaatgg
                                                                     2100
acgaccactc cattggggta tettgcaaat gcactgttcc caatettett ettacacacc
                                                                     2160
atgeacacet tetectetgt gatgatgeae tteacetget ggtgtaaaat eegetettee
                                                                     2220
tggaaccete aggaattetg catggagaag gttettgage acttgattga accgtttett
                                                                     2280
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                                                                     2580
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                                                                     2700
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                                                                     2760
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                                                                     2820
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                                                                     2880
ctcctcccaa acatggatga tgtgttccag ataaggaata gccagaccct taaaattctc
                                                                     2940
tattaagaag ccgaggactc gatcacgtgg cagagactcc acttccggga gatcttcagt
                                                                     3000
aaatatette aggeeatett etgggaagte teteageace cacactgagt aggagaaaat
                                                                     3060
caaatgcagg ttttctgtgc ccagatgctg cagatactgc actgtcctct cgtggccttt
                                                                     3120
cagaggggag ttggctttct tggactggtc cacgagcacc tgcagagctt tctcgtggag
                                                                     3180
eccettette teatacagga tgataagete actgtaettg tgageettet teageacgtg
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                                                                     3480
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ggcatacaag ttcttgatgt gatgaatttg ttgctgcttt tcactgtcag aatcatcttt
                                                                     3720
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                                                                     3780
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                                                                     3840
gtttgatcct cctgaggtaa tgaaacgggg cctttgcaat tcaatgcttt ggaccagaag
                                                                     3900
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                                                                     3960
ctggtgctcc atggccactg gtatgtccgt ccagttcagg gcacatttct gtgtgcagat
                                                                     4020
cectteetea ttgagtacea eggtgagate atcetggeee acaqeeactt ttecatetge
                                                                     4080
cagaggtgca actaagggct ccagctgttt tcctgttgga aagagctctt tgatggaccc
                                                                     4140
ctttccatcc acccttatta ggtagtagtc tctcttgaaa cccacacaga tagaattttc
                                                                     4200
acaccacgcc atggacttgg gcacatctgg cacactaaag tccccctgca attc
                                                                     4254
```

```
<210> 3667
<211> 4956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3207)
<223> similar to gi5689469 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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tgctggccac cctgaatggc agtgtgctgg acagcccagc cgagggccct gggccagctg

ecectgeete ggaggtegag ggeeagaage tgeggaaegt getggtgetg ageggeggg

agggetacat cgaetteege attggagaeg gagaggaega cgagaeggag gagggegeag

gggacatgag ccaggtgaag cccgtgctgt ccaaggcaga gcgcagtcac atcatcgtgt

ggcaggtgtc ctacaccccc gagtgaagct gctgccctgc ctggcccgac ctgtacatag

gacceegae cacetgace eegeeggee egeggggtag ceageeagge geegeegee

ctcttctaac ctctcaacct gcagctttca cctgagtctg gcccctccag cgggcaggga

2880

2940

3000

3060

3120

3180

3240

3360

3300 '

```
gtgcggggat gcggatcaac tgggaggagg aggggaggg tgcttccacc cgaggggaag
                                                                      3420
 atgetetegg gacagtttee egggeagete etggeeaget tecageecag agteeteaag
                                                                      3480
 tccagggcac cttgggccca gcgcaggcag aatccgaggt ggtcctggct ctaccctggg
                                                                      3540
 ectectaete eccageace etggaggagg caggggetee eegeegeega ggetgeetge
                                                                      3600
 cctgggccca cctctgcatg ctgctcatgg ggccaccctg cctcctgggc cctcactctg
                                                                      3660
 cctaggggag ctgggccagg cactagcctt tgcccaggga ggtgggcctc aggctgccca
                                                                      3720
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ctgtccccac cccagctgtc ccctgcccag ggagctggca taaaagcacg aggcccggct
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                                                                      4320
 getetecetg eccagetggg cetetetgge ectaatteet aacetteeca ggeecaetge
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                                                                      4680
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                                                                      4860
 ttgggccaac ctccctacag aaattaaagg ctctagggaa aatataaaat tttaaagggt
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                                                                      4956
```

```
<210> 3668
<211> 1647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1500) ... (1127)
<223> similar to gi536926 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3668
ttttttttt ttaccttatt gaaaaatggt ttaataaata taattattaa ataaatgtta
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agactttaaa tactaaccca agaaaaattt aaaaatacaa attcagtaag acttttgctc
                                                                      120
taacaacaat ttttcaaaac gaatcaacaa caaaaaagta tccagtgttt cttttcttat
                                                                      180
gaagattatt aataaaacac agtatttggt aagcacattt taacagtatg cttgtctttt
                                                                      240
gtagggaaaa ggaaatttgg gtttgtctaa catcgtggga tccaatgtgt ttgatatgtt
                                                                      300
gtgccttggt attccatggt ttattaaaac tgcatttata aatggatcag ctcctgcaga
                                                                      360
agtaaacagc agaggactaa cttacataac catctctctc aacatttcaa ttattttct
                                                                      420
ttttttagca gttcacttca atggctggaa actagacaga aagttgggaa tagtctgcct
                                                                      480
attatcatac ttggggcttg ctacattatc agttctatat gaacttggaa ttattggaaa
                                                                      540
taataaaata aggggctgtg gaggttgata ttattaatag tgttatgcag aaaatatgaa
                                                                      600
```

```
tggcagggag gggcagagag aaaaatccat ttcttcattt aaatcaaatt ttaaaaatct
                                                                      660
tgaaccttag aatctaaaac ttacagtaat ttaaaaccaa ccaaaatcac atcctaattt
                                                                      720
ttgtgagccc tttcttttca tgaaaaatta catattataa aacagaagtt tggggggaaa
                                                                      780
aaatctatgt tttaccatac aataagttga caaaaactgg agaaactaga acaaacaaat
                                                                      840
ccaactatgt agtactgaaa acaacaagaa aatggcttat ttcattaaaa acagtataac
                                                                      900
cattcattta aactgaatga ccagacttgc tgtctttaaa aacccaaact tgagattaac
                                                                      960
aaaaattaca gtatattttt aacattatac tgttaaaagc tggtgggagt tttaaaagtt
                                                                     1020
catttttaca gcttttgtaa gcatacaata ttactttaaa aaaatgactt ttactaqgaq
                                                                     1080
attcagcaaa acagatgtag gaatgttcca accatggctt gaaattatgc attacgatcc
                                                                     1140
aagcgaacat caatttctct gccactgatt tttatgccat tcattattct gcaggctttt
                                                                     1200
tcagctgatt ctggggagtc aaatctgact gttccacagc cttttgactt tccattctcc
                                                                     1260
atttttattt ctgcaaacat tacatgacat ttctgacaaa tatctggttg cctttggagc
                                                                     1320
ctattototo totoattoog ottoccattg gaccogataa aaatootoga tocatatoga
                                                                     1380
tgctcctttc cagtatagct cctatacctg gtcccattct atcaaagctg gaactcatcc
                                                                     1440
ggtccagtcc catccccatt cctccagtca cactgttcat gctacccatt ccaccacctg
                                                                     1500
gattttcaag aaaggacggg gggatttggg aattttgtgt ttttgtttca aaaacataag
                                                                     1560
gaaaaggaga agaggagaaa ggaggaaaag gagataaaca tttttgagaa agaaggggga
                                                                     1620
aattaatttg tttatataat taaatcc
                                                                     1647
```

```
<210> 3669
<211> 2126
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1954)...(463)
<223> similar to gi971461 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3669
ttttttttt ttccagagac aacttctaag tttctcttta tttcttttgg aaacaacctc
                                                                       60
cattetteat eteteaatgt agteetggee tagtgaaaaa gaaggetttt etttetggee
                                                                      120
tocagagact getteetttg taggaaaagg aacaataaac aetteecatt aggtttetgt
                                                                      180
ctccagatac caatcaggga atgactggcc aggactggaa cttaacggcc ttgagaacat
                                                                      240
gtgggatttg tetttgagee ceattggett gtgatgtttt cetetgteet eeetgagaea
                                                                      300
gttgeteetg teetgggggg getetgeete caceteecag teeaggatgt etgaggtggt
                                                                      360
tgcaggctgc ttgctgccca gtttccagtc tgttctggtc caggaaagca ccaccccatg
                                                                      420
geeettgetg ettetggeag gggteeteaa gageteacea tgteeeagtg etggeteatg
                                                                      480
agtgaggact cacatgggtt gacgacgatt teettgeegt teteggtgee atcacegaac
                                                                      540
atatetgtat egaggeagag gtgggatget atgtgetega tgtgggaace agttttggte
                                                                      600
cattgctgtc ggtcatctcc attcttgcaa aggacaagaa ccactggggc gccagggaac
                                                                      660
aaggtgatga ctgacaggca cageteetee tggaggatet getgggtgta tgtgaaggee
                                                                      720
catacetggg actttgcate tregeetttg acettggcae aggggeteaa etttaggttt
                                                                      780
ggggtttett ggttgttetg cetttgagat tecaggeact tetgtetetg teggatattg
                                                                      840
cccttctgga tggaggactc cttggggatg ctgagttcag ggtagatatt ctccaggtac
                                                                      900
cacttgaage tetggeageg cagattette etcaggteca atetgetete aacatteceg
                                                                      960
aagggcctct ccagggcgaa tggccgggca gcgtaatagt attgcttgta ttcatccatc
                                                                     1020
cacacttcag ctgtccgctt ggtgttcttt atatacgtgt tggcatttcc atcagggaaa
                                                                     1080
acgtaggggt gettetteeg gaagaegtge eccaetegge tgeaggggae gatetetagg
                                                                     1140
```

```
ctgccccgc acatccacac tcqqaaggag atttcaaagt tctccccacc ccaqatqtcc
                                                                    1200
atgtccatat catatttccc caggtaatca aaccaagctt tgtcgatcac gaagagccct
                                                                    1260
ccagctatga taggagteet gatgggetee gtggggteea ggegeegage ettetgetet
                                                                    1320
9999agagct gctcccactg gaagtggagg ctccagtcaa accccctct gagctccqaq
                                                                    1380
gcagactcga tgtaggtgaa ggtgtccagg ttaatgatat cgatcacagg gcacaccacc
                                                                    1440
egegtgtagt cetetttgae cetgtgeaac agaggetgga gecagteect gtteacetea'
                                                                    1500
cagtggctgt cgaggaaagt cagagtggtg ccctgggcga tgtcagcgcc ccgaatccgg
                                                                    1560
gaccggacca gaccttgccg ttcattattg cgcaagcatt tcaccttggg caacttgatg
                                                                    1620
agctgtttac agtcatcagg gtcattgctg aagtcatcca ctaatatgat ttcccggatc
                                                                    1680
agatgcgtag gggtgcggtt taatacactg cggattggtc ctgagcagcg tggagcgggc
                                                                    1740
cctcgttgtg gaaggtgatg atgatgctag tgggtggaag gtccgtgcaa tacaccagca
                                                                    1800
gtgtgcatct cagatggcga gtgtccggga tggcccgatt gctggagatc cgctcactct
                                                                    1860
cccgctggtt gaaagcatac agcttatagg ggtcgtcacc aacgcgccac tttttggcat
                                                                    1920
teagataceg ecgeteatea aactggteec acaggtegte ecagteageg teegaagget
                                                                    1980
taggggtetg cactteaggt eccgteggea cetecaactt cetettiggtt acceaqaaga
                                                                    2040
acagcagcac cgtgatccag agcaccccga agactggcag aaccagccga cgaqtcaggc
                                                                    2100
gccgcatggt cccctttqcc acgaaa
                                                                    2126
```

```
<210> 3670
<211> 698
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (78)...(569)
<223> similar to gi4150939 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3670
gegeteetgg cegtggeeet gaacetgetg gegetgetgt tegecaceae egettteete
                                                                       60
accacgcact ggcgctctac agctgggaga ccggcgacga ccgcttcctc ttcaggaatt
                                                                      120
tecacacegg catetggtae tegtgegagg aggageteag egggettggt gaaaaatgte
                                                                      180
gcagcttcat tgacctggcc ccggcgtcgg agaaaggggt cctgtggctg tctgtggtct
                                                                      240
ccgaggtgct gtacattctg ctgctggtgg ttggcttcag cctcatgtgt ctcgagctct
                                                                      300
tecactecag caatgicate gaegggetea ageteaatge ettegegget gtetteaegg
                                                                      360
tgctctcagg cctcctggga atggtcgccc acatgatgta cacgcaggtg ttccaggtca
                                                                      420
ccgtgggcct cggtcctgag gactggagac cccattcctg ggactacggg tggtccttct
                                                                      480
geetggegtg gggeteettt acctgetgea tggcageete tgtcaccaeg etcaacteet
                                                                      540
acaccaagac ggtcattgag ttccggcaca agcgcaaggt ctttgagcag ggctaccggg
                                                                      600
aagagccgac cttcatagac cctgaggcca tcaagtactt ccgggagagg atggagaaga
                                                                      660
gggacgggag cgaggaggac tttcacttag actgccqc
                                                                      698
```

```
<210> 3671
<211> 2146
<212> DNA
```

<213> Homo sapiens

<220>
<221> misc_feature
<222> (2140)...(1996)

<400> 3671

<223> similar to gi2580578 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
ccactgtggc gtttgatcga taaacgcaca tgcgaggtgg agggtggctg gtgtgtaatg
                                                                       60
tgcccggcag ccttcatagc aaaggagaat tctagaacca accgaagtgc ccctctgaag
                                                                      120
ggagetggte cegteegtte cageegeegt ggagtaacac agecageagt tteecteetg
                                                                      180
ccacgaaagc tcgagactga aactcaggat gaactgtttt cagcccgggt caccccagcc
                                                                      240
ctggggtgga ggcccattga ggatggccga gcaggggggg gcatccaggc aggtccagca
                                                                      300
gtcctggcgg gctgaggaga aggaggtcag tgctcaggga gacatccgca gagggacctg
                                                                      360
gcaggcagag ctccagaagg gagggaactg cacagacaga aagctccaga aggctgcctg
                                                                      420
agggeetetg aggeeteegg agteaggege catgeatgtg gaaggtggae tetteageat
                                                                      480
ggatgggacc ctagggggct gtggaccccc ggcccctggg actcacaggt gggagacagg
                                                                      540
agttccaacc gccagggga gagtcctgga ggatcctggg ctgttggcag ccacccagca
                                                                      600
gggcccgtcc tgggagtggg gctggactct tcctgcagga aaggctgggc tggacctqct
                                                                      660
ctgagagget teagaaceag ceacaegaag accaaagtga agageaagga getgaactee
                                                                      720
acgcagaaca cagcgcagcg tcctttaaag gaaggccaaa aacaacccaa caaaaatgcc
                                                                      780
aggtgatcaa ageggteaca geacaatgte cacatecaae gagaaattge tactaegtee
                                                                      840
agacgcaggg aaaggtggcc gtgggaacgt gagtcagcag caacaggccc agaagggcag
                                                                      900
ccacggtgga cttgtcagac gtggaccctg aaatgacaat cacagcatga tttcaggcag
                                                                      960
gagcctgaaa tggtacagct ttggacatcg gtttggcaaa ttcttttaga gagaaacaca
                                                                     1020
caccttccct aggacccagc aactccactc ctaataacca agtgaaatgg aaggagttgt
                                                                     1080
cctcagcaaa acgtgtgtgc ggaagttcac agtcactttc tcggtgataa ccaagagctg
                                                                     1140
gaaaccactg caacacccac cagcaggtga acggattaac acactgggct agggccacac
                                                                     1200
aatgagatge teegtggeaa cacaaaatga accgtggaca cacaetgeac ggeggatgaa 🤸
                                                                     1260
tatgcagaca tcaggccacg tgaagggagc caggccccga ggcgccacgc tttgtgattc
                                                                     1320
agggtggtcc ctctgcgccc aagacccggc tgcctcctcc tcttcctggc tgcagggagt
                                                                     1380
gcttgtgtct gaagaacgcc aggctggtgt ccccagaggg cggctggagg ggctcagaaa
                                                                     1440
ccattttcac cttctgtctc ctccatgtct gcactgtttg ggtttgtacc cgcctgtgtc
                                                                     1500
gettttgeac gggaagtgag atggagagac acgtgaacca ccattgetgg ggttccagca
                                                                     1560
tggggcccca ggggacccat ggctttccca gaaggaagct ctgccattgg acagccggtc
                                                                     1620
teaggetget geacaggee eteceegee teagecetgg cetgegggaa teaggaaagg
                                                                     1680
gtggggtcca gctgcattgc gaatggacta aagccactga tttgcacact tgccaatggc
                                                                     1740
tgaaatggtc aataaaacgt catgtacctt ttgccacagg aaagaaagca cgcagccaaa
                                                                     1800
gagcgcaaag aggctcagag gaggcccggg tgccctggag agacgctgcg gtcctgacga
                                                                     1860
cacagcatec etgteegeea geggagattt teccagataa agaatteece ggegggagae
                                                                     1920
agggccctgc acacaggtcc tttgccatgc tgctcaccat gcctgtgtgt tatctcccca
                                                                     1980
tgaaaagtca cctaggccga gcatggtggc tcacgcctgt aatcccagca ctttgggagg
                                                                     2040
tggaggcgtg cggatcattt gagatcagga gtttgagacc atcctgagta acatggtgaa
                                                                     2100
accccgtttt taggaagaat acaaaaatta actgggaaaa aaaaaa
                                                                     2146
```

<210> 3672

<211> 1193

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1195)...(1011)
<223> similar to gi299471 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3672
tcctagtcca tgtggaggaa ttcagcccgt taggacgtgg gaaggtccac aggtggggcc
                                                                       60
gagtaaaggg ggacaggaga cgtgcggggc aggacctcgg ggctggatgc agaggccggg
                                                                      120
gtggtggaaa ggggaggaga actgggcagg gcagataagt gggtggggcc tctggaggtg
                                                                      180
gcgggggcaa ggttggagcc ccgggacgaa gaagggacgc gggtcagcga ggcctgaaga
                                                                      240
gtgggaggag atgggacccg gctgtagagt gcccagaggt ctaggccagg ggccgcgctg
                                                                      300
ccgcaggaag atgcgagagt ttggctttgg tgatctggtc cacccggggc caqtcttqcc
                                                                      360
ccctctgcca ccgcagcgta gggcctcctg cattccgttt ctctggccgg aagggtctag
                                                                      420
tgttcatccc tctcaggctt tggcctcctc ccactctccc gccctggggc ccattcgttt
                                                                      480
aggaagaatg ggagagccgg tcgtggcccc tgggcggggt aaaggaggga ggcttggtaa
                                                                      540
acctctgctg gggaggaccc agtacagtgg cagctccttg tcgggggaaag aacggatctg
                                                                      600
gggaaagaac ggatctgcgt cacacgctct tacaggggaa ccctaagggg cctgaggggt
                                                                      660
agggcttggt ctccacccag agggaaggag aaatttttcg agtcgtaaag aaatgtatca
                                                                      7.20
gaagccatgg aacatttaca gccgcacacg ctgggtctcc caacaaacag atccccaaaa
                                                                      780
tattttecag tgetgtaete gtggeataga cecagaecea cagaecagga ggaagegeta
                                                                      840
gagatgtcaa cagccaacaa aaacagtgct ttacacactt gtaaaattgt gacctacagg
                                                                      900
ggctgggcac tgtggctcac gcctgtaacc ccagcacttt gggtggccaa ggtgggagga
                                                                      960
ttgcttgagc cccaggagtt cgagatcagc ctggcaaaca tggtaaaatc ctgtctctac
                                                                     1020
taaaaataca aaaattagct gggcgtggtg gtgcatgcct gtaatcccag ctacctggga
ggctgaggca ggagaattgc tggaacccaa aaggcggagg ctgcagtgag ccgagattgc
gccattgcac ttcagtttcg gccacaaagc gagagtccgt ctcaaaaaaa aaa
                                                                     1193
```

```
<210> 3673
<211> 2427
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20) ... (972)
<223> similar to gill09880 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3673
agacagttaa tgaggtctac aagctggtca tccccatcct agaagcgcat cgagaattcc 60
ggaagctgac actcactcac agcaagctgc agagagcctt cgacagcatc gttaacaagg 120
atcataagag aatgtttgga acctacttcc gagttggttt ctttggatcc aaatttgggg 180
atttggatga acaggaattt gtctacaaag agcctgcaat taccaagctt cctgagatct 240
cacatagact agaggcattt tatggtcaat gttttggtgc agaatttgtg gaagtgatta 300
aagactccac tcctgtggac aaaaccaagt tggatcctaa caaggcctac atacagatca 360
```

```
cttttgtgga gccctacttt gatgagtatg agatgaaaga cagggtcaca tactttgaga
                                                                      420
agaatttcaa cctccggagg ttcatgtaca ccaccccgtt caccctggag gggcggcctc
                                                                      480
ggggagaget geatgageag tacagaagga acacagteet gaccaetatg cacqeettee
                                                                      540
cctacatcaa gaccaggatc agcgtcatcc agaaggagga gtttgttttg acaccgattg
                                                                      600
aagttgccat tgaagacatg aagaagaaga ccctgcagtt agcagttgcc attaaccagg
                                                                      660
agccgcctga tgcaaagatg cttcagatgg tgctgcaagg ctctgtggga gctactgtaa
                                                                      720
atcagggacc actggaagta gcccaagtgt ttttggctga aattcctgct gatccaaaac
                                                                      780
tetategaea teacaacaag ttgaggttat getttaagga atteateatg agatgtggtg
                                                                      840
aagctgtaga gaaaaacaag cgtctcatca cggcagacca gagggaatat cagcaggaac
                                                                      900
tcaaaaagaa ctataacaag ctaaaagaga acctcaggcc aatgatcgag cggaaaattc
                                                                      960
cagaactgta caagccaata ttcagagttg agagtcaaaa gagggactcc ttccacagat
                                                                     1020
ctagtttcag gaaatgtgaa acccagttgt cacagggcag ctaagaaaag ccatcttcat
                                                                     1080
tegtggagae tgtggeeetg caaceetgga gaaggaettg etggtaetta aaaaatggga
                                                                     1140
catttgccac ccaggactga ctgtacactc cctgatcagc cagcactctg gaagctttgg
                                                                     1200
gateceagga accatggaat tatteceaaa tggaetetga eeagattttt geeataetgg
                                                                     1260
9999t99c99 gatggaggat gggtactcag gcatgactgc gtatttatta aagtgtgttt
                                                                     1320
ttccacaatg taccaaacaa ggcataagca gcttctcctg ctgactggcc aatcactgcc
                                                                     1380
catctgagag atgatttcct ctggcccata tttgaattta ttggagtaac tcaaattgcc
                                                                     1440
tgaggaaaaa tggaaaaatt atccaccagt cgattcaaac tgaatttcac tctttatagg
                                                                     1500
aaggcagggc aaacttgtag gagtaccgaa acattttcaa taaatctaca aagggaagcc
                                                                     1560
ttactacaat tccaaaaatc atcatggttg gaaatttggg aggaggatta tttgtgaaac
                                                                     1620
ttgttaccct tttggtaatg gtggactaat ttgctgtata gttatttttg ttttattatt
                                                                     1680
actgttacca ttaattttaa catgcattta tagaagaata cattcaaagc actgatgtag
                                                                     1740
gagatacacg gtacttggag cagtcagcca aaaatcacag atactgcttt cacttaaatg
                                                                     1800
gaaacaattc teegataatg etttgetttt tttettatgt eactettgtg tactatetat
                                                                     1860
ttttctcctc tctgggacca agtttctttt tataaagcaa taatatctct gttttcattt
                                                                     1920
cagaacattg tgctgtctgt cagcatatgt atatcagcta caaaatatat tcaactttga
                                                                     1980
cttcttttga caaaggactt taggaaaaag aggaacaaag acattatttq agaattaaat
                                                                     2040
tatatatttt taatatgact gtgaccttga ctgataataa agatgtaata agaattgcaa
                                                                     2100
getaaatgtt teeetttgea acteatgett tgtgttttgt tttgatgace tactegeteg
                                                                     2160
taatgttttg taaggcactt cagagagaag acagatgcat catcctggcc tccatcaaat
                                                                     2220
aacactatee aaggtggeae etettetgea atgtttaaee etgetgttgt ceatttgggt
                                                                     2280
ttgtttttta cagtctcttt tgtaccacag tggatacatt tgcttcatga gtgcaggaac
                                                                     2340
catgiticact goigoattot taccoctage cotgggtoca cotageotgi aagtgoocco
                                                                     2400
tgagggtatc aaagcacgcg gacttcc
                                                                     2427
```

```
<210> 3674
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1767)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1552)...(1077)
<223> similar to gi5824799 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3674
tttttttttt ttagaaaggc agatgatttc tttattgtaa agacagcagt tacaaaagag
                                                                       60
aataaatatg acattaggat atatttgtta aaaatacaac aaaaacccct agtatttgtg
                                                                      120
agcaacccca agaactcaca agtatggggg ataagaacat ctacagctgg ataccctgaa
                                                                      180
acagatgtta gaaactggct aatggtgagt atggccatga ctttgggggat gtttgaaagg
                                                                      240
ecctggatet gteacttggg aacgteageg gtetactgta atacaatttg cacagagtea
                                                                      300
gagtgaacag gaaccetttt acteattggt atectaacta ttetttegtt ettacagtga
                                                                      360
agtagtacag tatttaagag tggggaaaag gctgagctgg gaagacatag acggagcaag
                                                                      420
gtgaagaggg agggactggg ggaatgctaa ggggccagga gaaaggtggc aggaaggagc
                                                                      480
agacetetgt cettteteta atgtgtgtta etgtggtgge atgetgttee teetgttgaa
                                                                      540
gagtggacgg gcagtggtcc acccagcctc cattaagacc caccattacc caggaacaga
                                                                      600
agatgcaaaa gcaactggca gaatcctacc aaagatgaga acagggaagt tgaatgtgaa
                                                                      660
gcagagagga gtgcagagaa ttctccgaga aaatgggcat tttctctgag gacccaaaaa
                                                                      720
gacagacata totacacaaa tigatatago agactactot tigatgggga atggtaaagg
                                                                      780
gacaaggaca aagtgaaggt tgctgagaag atacaagttc tggctataag aagggcagag
                                                                      840
gagcagaggc aggagacaga ggtgggcagg catctggccc accccaggac cctcctggag
                                                                      900
gggcttggac actgggagga atgaaggctg gcacgggagc tggcacgggg tggtggatgg
                                                                      960
agatgetgge teagggaggg gacegacage agtgatgaag atgeetagte atetettete
                                                                     1020
ggggcatctg tgaggcacag ctgtgggcag agggcaaggt cagcaggact atgtattgaa
                                                                     1080
gttggeettg agtttetgga aggetgeetg geggageege eteteeteet eeteeegett
                                                                     1140
cogotoatet tgotoagott toaactotgo ttoaaactta otggoogatg acaaggottg
                                                                     1200
gaccttggct tcaaagaagt tcttggcacc tttgacaccc tccagggcca catcgatcte
                                                                     1260
agaaagettt gecagegeea teageceaet gteeteetge ageteeeetg eegeggeett
                                                                     1320
gtggaaaatg agcaggaact cccggaaget gagettgeca tegaagteet catecacete
                                                                     1380
ettgateatg etetteagge eeaggtgggt etggggggee eeeagettet eeateateag
                                                                     1440
cttcagctcc atcaggtcga tgaagccatc ccgcccagcg tcatacagtt tgaacatgct
                                                                     1500
ctccaggtcc ttgatgaggc ggcggctgaa ctccggggaa ctccgtgtag gggttgaaga
                                                                     1560
ccctgcagcg ccggggccgc gcagcgccct cgttgatgtc cagccgccgg ctcagctggg
                                                                     1620
cgctcaatcc gcgtcggcgc tggccgtggg cgcacgggcg ggaggctcgg gctcgggctt
                                                                     1680
gggctccggg gctgggggcgc cgaggggagc cagctggggg ccactctcct cggccacccn
                                                                     1740
acgccgcagc cggcgctcca gcttgc
                                                                     1766
```

```
<210> 3675
<211> 2416
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (2417)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2383) . . . (2122)
<223> similar to gil872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3675
ttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt
                                                                       60
tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga
                                                                      120
gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc
                                                                      180
ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
                                                                      240
gttaaaatag aattctggac ctttttaaaa agtttttgga tgatataagc acaggaggca
                                                                      300
gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
                                                                      360
tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct
                                                                      420
ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc
                                                                      480
cccaaggaac agcccatgac aaccttctgt gcctttttat actttcccat cctacaaagg
                                                                      540
aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc
                                                                      600
aggttetttt aaaattagte atettacaae acaacagtat tetageaegg tggegaagtg
                                                                      660
acaggcggca gatacggggg aggaaggaga cgttcacggg aaattccaca ttctactcta
                                                                      720
tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga
                                                                      780
tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc
                                                                      840
atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc
                                                                      900
tataacattc tttttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac
                                                                      960
ggggggatac aagcatatcc tatactgggg gtgacggtca ttcaaagagc aaattactgc
                                                                     1020
agcttatatc ttttccacta tgttgcaaga aatgaatcta tcctgaccca taatatgaaa
                                                                     1080
gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat
                                                                     1140
cetegtggag tggagagtgg tecaettgae ttggtgaggt cagaagttee tgaagateee
                                                                     1200
tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat
                                                                     1260
gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tgtgtcatcc
                                                                     1320
gggettgtet ttegtetgte aagteagtee teetgegtga etgatgggtg caccaegett
                                                                     1380
aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctqa qcqqtttqca
                                                                     1440
gtcccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                     1500
gecaetteet etteacetge etgggeetea gegtetetge gettgtggtt tetegteece
                                                                     1560
gagggctgac tgagctgctc cggaagggtg gtgtgtggtc aaccttggtt ggctgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                     1680
teeetgteee tttggettet ataggaette ettgtettag atteataaac ageaagagga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgcc
                                                                     1800
gacatcatcc ccaggettec gtggcgctct cggtcacagg agetttaggc caatggttcc
                                                                     1860
tettgaetgt ttttgeecea aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
99999999t ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<210> 3676

<211> 2416

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2417)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (2383)...(2122)
<223> similar to gi1872200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3676
ttttttttt ttttttca caagttatat tttattttaa cacgaggatt aacatatagt
                                                                       60
tacaaggtca atacaagcct ccagtggaag ctctttattt ggtttaattc catctccaga
                                                                      120
gacaaacagg caactctagg acctttacag tggcgatcgg cctccacnac agcaaaatgc
                                                                      180
ctccaaagtt tagaattagt gcaacacaca tacgaacgtt ttaaaggtgc tcaacatcag
                                                                      240
gttaaaatag aattetggac etttttaaaa agtttttgga tgatataage acaggaggca
                                                                      300
gagccaataa gaaacatgaa accaatattt ctggaaaaac acttagcatg aacgtcactt
                                                                      360
tttgacgtcg tgtaaacttt cttctgcaat gacggatgtt accaaaaggc attgagacct
                                                                      420
ttgcgctgcg ctggttagac aagccgcagg cttatctcca cggtgagcag gataaaaacc
                                                                      480
eccaaggaac ageceatgac aacettetgt geetttttat aettteecat eetacaaagg
                                                                      540
aaaaactggg taaaggacaa gttcctccct ttcattgcgt ttctaagaac ttttcagggc
                                                                      600
aggitettit aaaattagte atettacaac acaacagtat tetageaegg tggegaagtg
                                                                      660
acaggeggea gataeggggg aggaaggaga egtteaeggg aaatteeaca ttetaeteta
                                                                      720
tgtgaactgc tccagaaaaa tacagacatg atttcacagt aggattccca gagtaaatga
                                                                      780
tgatacatag gacaactgac ctcctctaag aagcccggct ggggcagcag tgagcttttc
                                                                      840
atggagccac gcagactggc ccggaagcaa cacccaggtt caacatttaa gagcactcgc
                                                                      900
tataacattc titttggacg caggtggtgg aaaagtttaa aaaacaggcg gaggagtgac
                                                                      960
ggggggatac aagcatatec tatactgggg gtgacggtca ttcaaagagc aaattactgc
                                                                     1020
agettatate tittecaeta igitgeaaga aaigaateta teelgaeeea taataigaaa
                                                                     1080
gatgcgacgc acatgcattc ccgaggctct aaaatcccat tttaaagaac cgtttcacat
                                                                     1140
cctcgtggag tggagagtgg tccacttgac ttggtgaggt cagaagttcc tqaaqatccc
                                                                     1200
tgtcgtcccc gttggcgggg gagcccattg tggagctgtg gggactgcca cactcaccat
                                                                     1260
gcacctgttg gtttgcaggg acagaggtgc ggccttgact cttctcaccc tgtgtcatcc
                                                                     1320
gggcttgtct ttcgtctgtc aagtcagtcc tcctgcgtga ctgatgggtg caccacgctt
                                                                     1380
aggtcacccg ttgcagggac cggaagtcca tggctctgcc gcaaccctga gcggtttgca
                                                                     1440
gtccccccg gggaagaagc agtcagagag gctcacgctc acctacttta aaaacccaaa
                                                                     1500
gecaetteet etteacetge etgggeetea gegtetetge gettgtggtt tetegteee
                                                                     1560
gagggetgae tgagetgete eggaagggtg gtgtgtggte aacettggtt ggetgagagg
                                                                     1620
agcaatttcc tggtttccac aagtaaagac agccccatcc cttgggacct gtcctttccg
                                                                     1680
tecetgteec titggettet ataggaette ettgtettag atteataaac agcaagaga
                                                                     1740
actgaggatg cttgagggga ccacctagtt accaaagcca agcaaagaat aaagctgccc
                                                                     1800
gacatcatcc ccaggettec gtggcgetet eggtcacagg agetttagge caatggttee
                                                                     1860
tettgaetgt ttttgeecca aatgagagga ggggetgett tgetttaagg egtggeggeg
                                                                     1920
ggggggggt ggtggccaca gattagggga cctcaggttt tcctcaaaaa cccacacagg
                                                                     1980
gaaagaaact tggctctaaa agcaaactca acgaattcca catgccctga agagcacgtg
                                                                     2040
ataaaataca agggtggtgg cggcgggatc cctcaaagga ccacgagagg cacggggtct
                                                                     2100
ttggtgatga aagtgctaac ctcggcgggg tgcggtagct cacacctgta atctcagcac
                                                                     2160
tttgggaggc tgaggcgggc ggatcacctg aggtcaggag tttgagacca gcctgaccaa
                                                                     2220
cacggtgaaa ccctgtctct actaaaaata caaacattag ccgggcgtgg tggtgcacgc
                                                                     2280.
ctgtaatcac agctatttgg gaggctgagg caggagaatc gctggaaccc aggaggtgga
                                                                     2340
ggttgtagtg agccgagatc atgccactgc actccagtct gaacaataga gcgagactcc
                                                                     2400
cgtctcaaaa aaaaaa
                                                                     2416
```

```
<211> 1495
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1498)...(732)
<223> similar to gi32093 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3677
tggccattta ggaaaaattg tccttgggga tcctctaaaa aatccttttg tgtccaatag
                                                                       60
caccttaaaa aacctgggcc ccagataatt gttgaacctc agatttagga aggaaaattt
                                                                      120
ccaagctgtc agctaaaggc agtttccccc atttcacaga atatgtggta gaagttccga
                                                                      180
gtaaggaatt ttttcagcag ccatgaaagc tccctgcata aggaagactc agtgtgcaac
                                                                      240
atctgaaagc agtattgcca gagcatgact gtggcaatga agcaaaatgt tccctccacc
                                                                      300
tatccctccc tcccatgtat aatgcttgaa gggtcagtcc ctgaaataag tagagagaaa
                                                                      360
agtgtttgct gaaagagcta atacataagt caaccttcac tggtaccaat gaaggcttcc
                                                                      420
cagttcaaaa ttcaacaccc agaaaaggca gaaattttag ctttaaatta agtttaaatt
                                                                      480
ttcagttatc ccagtggact aggcatttaa atctgaggag ttccctgaga ttccatatga
                                                                      540
ggaaatgaaa aacattagct tgtggattaa atttaaagag actgtaagga gaaaaacata
                                                                      600
ttttatgaca tgcctcttaa ggactcctat tatttcaatg aatttgttac agttataata
                                                                      660
tgcttgtgat aaaaaggcat tatttattaa gaaatctaaa atgtaataat atttcaatta
                                                                      720
tatagtttta gagaaccttt cttgcccaac acttttctga tagcaagttg gacatccttg
                                                                      780
tttctgaggc tataaaccat ggggtttagt aatggagtga caatcgtgta tqtcaccqtc
                                                                      840
accagectgt etttgttgga cacatagttt getgtaggee teaggtagat gaaggaagea
                                                                      900
cagccataat gaacaataac aacactgagg tgagaggcgc aggtggaaaa cqctttccqt
                                                                      960
ctgccctcag ctgagggaat cttcaggata gtcctcagaa tgcagaaata agaaacacag
                                                                     1020
ataaacagaa agggaaccac aagtacaaga actccacaaa tgaatatcac aaatccgtta
                                                                     1080
acatctgtgt tggtacaagc cagaagaatg actgctgaga tgtcacagaa gtaatgattg
                                                                     1140
actitigitigg tigctacaaaa agggaggctg aaaactaaat ttactactgt aagagaggcc
                                                                     1200
aagaagccac caattgcaca ggcagctgcc agttttccac acacctgcca gctcataaga
                                                                     1260
gtggggtaat gcagagggtg acaaatggca gcatagcgat cataacccat cacacccaat
                                                                     1320
agcaggcagt tggtaatggc aaaaccaagg aagaagaaca tttgaagagc acaacagttg
                                                                     1380
aaggagattg teetggeeac agaaagtaga ttgatgagea tettgggtag aatgacaaag
                                                                     1440
gtgtagaagt ctcagatgtt gagagaaagc caggaagagg ccattggtgt gtgga
                                                                     1495
```

```
<210> 3678
<211> 5662
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5664)...(456)
<223> similar to gi2662085 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3678 ttttttttt tattcacaaa caaaacagtg attaaatttt attccttttt gagttgtttt 60 gtttttattt ttaaatgaag tttccatctg tacacgttaa gaaaataaac aaaacaacag 120 gaagccattc tetgtgtate etecttggag geaggaagga tggatetgee gataggeaea 180 caacagcaca cagccagggc tcatgggagt gagtgcccgt cacctcacga aggtcatggg 240 cctaaaacat acggaggete catagaaaat getecagetg getttgeagt catgcataaa 300 ggtgaggaca cttaattcaa ggcatctggg ggctggtgtc accgcacatg aagagtagtg 360 cccatgctgt cccacgaget teettgggaa aagggaaaaa caaatetttt cetcaaatag 420 aattgtcgca ggaaagagcc atgacatttt attcactgtt taatcatcgg gtggcaggat 480 ttetttgaag tagaatetgg tagtaceeet eecaatettt getggateae ttetaaatgg 540 tgaatatact ctgtcaagga atgttctgga tcttgagaag cagtcaggga tctttctaat 600 cttgaatttg gggatggagt ggctcttccc ccactgtgtg gggaggctgc tgctgccagt 660 ctgcggcctc tggcagggtc cctggtgtgg ccagagggta catcccgggt tggggggac 720 tetetggtte tgggtggaga etgeggetgt egtgeteggg geeetgggeg aggggetttg 780 ccttgtgcca gagctccttt ccgatctact tcttgccatt tcttaaccaa aaaacgtaat 840 cttaatattg caatgaccac cctgacggcc gtgcggaacc tggtgaaagg acgagatgtg 900 attttccgtt ctgctttgga aggaaatacc cccaaatggg caatcatgga gagtgtttct 960 tgttcagaat cctggaatcc accaatcaac agcaaaagat acttcttttg ataaatcaga 1020 gettttetaa agetetetge teteaagtaa tgeaggtaea attttteeat ettgaeattg 1080 ctggtgtgtg cttcctcgct ggcagctggt ggaagccggc cggggtctgg gcgcctcagg 1140 gaactetgtg gagecgttte gtetggette caageagace ttteegacet gettgggetg 1200 cagecettet geagatggtg etteageaac tteteaaget tagacaegge tetgeteage 1260 tecagettet eetgggteac egtgetgage gettttgtga gggaaacatt gtettteage 1320 aggacgtcca caaactggaa ctgcagctct gctgccattt ttttctggga ggaggtgggc 1380 ctgctcaagt cagactccag ctcctccaac gtgtgcagta aagacatcac tgctttctca 1440 ttggatgacg tccaatcatt aactgtcctg tccacggcct ggctggtgaa gctggtgaga 1500 agccgggcgg cagagagcag ccgctgcctc atcgcctcca gctctcgctg ctgttcccgg 1560 aggtggtccg catccgagcc ggcagccctg cgggcagaac ctaggtggag gcggctgcca 1620 ggcacctcgt cettegacte caggtetete actgtetget gaagetgett gatettatge 1680 aagtcacgct gacgctgcag ttctaattct cgctccttct ctctcctgag cgcctcacag 1740 tgettetgag ceteageete aagetgetge tgagaatgea gggettgetg etgeacettt 1800 teaageateg ettgeaagte caceaceegg gaetteteet cetteagett etgeageaga 1860 gcgtgatggg cctgtgtgtc ctggtgcacg caagcctcct gtgtcctctg gctcagctgc 1920 teggteagga geegetegtg eegeaaggee tetgaeaget eeagggtgeg getettetea 1980 gccgcaaggt ccttctggag ctcagagagc tggctccgct cctgagccag caaggcctcg 2040 cagegtgagt getegatacg cageteette tgeaggttgt cettggeegt etgetegtgt 2100 ttcagtgcca cgcagagtcg actgctctga gcacgctgtg tctccaaaga cgcccgcagc 2160 tectecaggg cettggeact etggetetec etetgeaggt geegeagetg etecteetee 2220 agetggetet geagggeacg eccetteeeg tgeteactet ecageteetg aagegeggee 2280 ttcagctcgt tctccttact gctcagcatg gatctcagct ggaggacctc ctgctgcacc 2340 tegeagaggg acegggacag etgttegete ttetgeetge teteacagag gteggaette 2400 aaatetegea etacagtetg eteegeegee aggagettet geaegetgtt tgeettetet 2460 tgctcttcac tcagcgtctt ctgcaagtcc ccagcaatgc acttctcctg ctctacttta 2520 taagccagca gttcaacctg cctgcgcagc tggtgctcct gctggctccc gcgcgcctct 2580 gegettgtea gegeegtgeg caagtgetge agetteteet ggttetgeag gtgegteatg 2640 egcatgetgg geaegeageg cetggatete ggaeageagg etgeteeggt eeggeaageg 2700 aagatgetee agggaetttt cetgeaggte teeetgetea eggatgatet teteeageet 2760 ttcgagcagg gagctgtgac cccccagatc tgagccactg agtcggggct gcagctcaac 2820 cccctgcatc.tcctgctctt tttcaaaggc ctcttgcaca acctgcagaa ggtgccctct 2880 ccaatcgggg cacgcggtgg gcacttcctg cgtctttccc ccatggagcg agatgtcctg 2940 tatctcgtct tccttccggg gtgggtgtgg ctcgccgctt gggggtgcaa ggccttctga 3000 cagcgccagg ataaggtggc tctcgtcacg caccatctgc agtaaagcct tcacgtgctt 3060 eggacgeact teetteteet teatggette eggeagegge tgaaacette eagagatgga 3120 agcaggggtc acaggaccag cagtttgagc ctcagggcct cctgaccccg ggctcagtct 3180 tgctccaaaa cccgagccgt cacttttctc acttctatca gcttttcctt ctaatccagg 3240 . aggaggtgaa cttaatgttt cttgagaatc aaaggatgtt gtgataaaat cttcgacatc 3300

```
tttctccaca gccgtcctct gcacatqqtg gtcgtcagcc ggcggagact cggcccactg
                                                                     3360
cagtgccage getgetgcag acaegeetgg ggaacaaage agecceggee cetgggtetg
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tggcagcgag gtgtccgccc tgtcccccag ggatgtgtcg gcactgcaca ggctcagggc
                                                                     3480
tectgagtgg ggtgtcacgg ggaggetqqq ccagggetcc agggtccaqt cettcetqaq
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gacctcaggg gagctccagg aagacaggtc cagcatcccg accgggctct tccggggccc
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agectetgea gtgtggetet ggtggeggga gecaecaagt aegetggteg gtgaagaaag
                                                                     3660
agacatgtcc tgacattctg atttttcttg aatgggagaa tctggcattt catctggtat
                                                                     3720
caaggaatcc caatttttga taacatcagt tacacccct ggggttgtat tggcatcaca
                                                                     3780
cgcgtctatg gcctgatttt tgataacatc agttacaccc cccgtggctg tattggcatc
                                                                     3840
acatgtgtet atgtggggtg atatgtcagg ctetteteeg teacaggaat cateacteca
                                                                     3900
gctgctctcc aacaggtgtg ctgaggccat gggccacaga gatttggtgt cggcagcatc
                                                                     3960
cacattetgg aaggteatgg aatacageaa aeggtteagt titteetgaa getgttteae
                                                                     4020
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                                                                     4080
geogeogtee tecagactea ggogeattte attitteace aagageaget ecgactgeag
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ctgcctctgg cagacggtga gcactgacat cacgccttct tgcttgcaga gaggtgcatc
                                                                     4200
ettcaaegte accaggacag getgeagate accetgtggg teagggacaa eeggeteeaa
                                                                     4260
agcagcatca tgggaggcct ccacgtcgcc ggtgacctgg gccttggcgc caccatccat
                                                                     4320
gegaggetgt gggtgggeee egggeaeeeg tgtgtgaget gtggetetge gggeetgeeg
                                                                     4380
cctgtccage tccacctggc acctcaggaa ccgctggtgc ageacctgea gctggcggct
                                                                     4440
gaggoggoa cactgogoto ggagocactg cagotoggga ggogoogooc oggotgocag
                                                                     4500
gggetgetge técagggege ggeggatgeg ggeéaaggeé aacaggaegg cetecagéte
                                                                     4560
ggcagagtgg gccgccttcc gctggttcag agcgtcgatt tctaaatttc tctcggcaat
                                                                     4620
egtegettee tittgettica gggeegette gaacteetgg ateegggagg ceatgiette
                                                                     4680
gacctcagec tecctgaggg ctacattgeg ctecagetea gecagetgta getecgeage
                                                                     4740
ctcctctgcg ccctggaggc gctgctgcag ggcctccagg gcctggctgt gcctgcgctc
                                                                     4800
ctggtcagec ageageegge teagggeete ettggettee agegeageet egagetegee
                                                                     4860
ctgtagggcc tgcccacgag ggcccccggc ctgggagcag agcagctcgc tctgcagact
                                                                     4920
gecageetga etgtegetga ettegtgeac cacaggeece atgagggaea getegtgetg
                                                                     4980
cagettetea atgaetteat ggagttgtte aattteetet gettteteet tttqtaateq
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tttctgattc tcttgcagat tttcaatagt ggctttcagc tcttcaatct cagaacttct
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ggtatatatg accttcaage tegtgttete tteeteaagt tetetgagge tgacageagt
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ctggctgttc tgcatgtcca attttaagtt cagatgtagt atttcttcat ttttactttc
                                                                     5220
taagtcacct ttcatctttt ctagctgttc ttttaagtcc aaaacctcgc tctcgcgccg
                                                                     5280
caggagtget etetgtgtea cetetaactg tatttetgga eceteaggag ggetgeega
                                                                     5340
aggaggeteg ggacatetge etgeatetag tgtagaetge aaegtggaeg eeagaageaa
                                                                     5400
getacteate tgetgtttet ttaacacete tttateetgt tecagecett teacgatgtt
                                                                     5460
tttetgtttt tecaettett eetggagetg ggeeaetttt tteetgatgt tgatgtteat
                                                                     5520
etectecaga egittaatit citetteetg cattaacact tgictatetg eegactetit
                                                                     5580
ctgtatagcc aattcattaa attcatccaa cttttctctc aacttttgtt gtaacaactc
                                                                     5640
aacctctcca tccagcggcg cc
                                                                     5662
```

```
<210> 3679
<211> 2655
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(2656)
<223> similar to gi2280485 in the genepe
```

		•					
<400>	3679						
cgaactgcta	cagaatgtga	cgttcgtatg	agcaagtcta	agtcagacaa	tcagatcagt		60
gacagagctg	ctttggaggc	caaagtgaag	gatcttctca	cgctggcaaa	aaccaaagac		120
gtagaaattt	tacatttgag	aaatgaactg	cgagacatgc	gtgcccagct	gggcattaat		180
gaggatcatt	ctgagggtga	tgaaaaatct	gagaaggaaa	ctattatggc	tcaccagccg		240
actgatgtgg	agtccacttt	attgcagttg	caggaacaga	atactgccat	ccgtgaagaa		300
		aaacagaatg					360
tccctagagc	agaggttaga	caattctgaa	aaactgtttg	gctatcagtc	cctgagccca		420
		gagcgatgga					480
		ggatctcttg					540
		caatttagac					600
		ggatgcacca					660
		gagcagcggg					720
		ggaagagaac					780
		tttacagcag					840
					cgataagttg		900
		tgaatacttc					960
		aaaaagtggg					1020
		ttttgaacgg					1080
agcaatactt	tgaaaatggc	agaacaagac	aataaggaag	ctcaagaaat	gataggggca		1140
ctcaaagaac	gcagtcacca	tatggagcga	attattgagt	ctgagcagaa	aggaaaagca		1200
gccttggcag	ccacgttaga	ggaatacaaa	gccacagtgg	ccagtgacca	gatagagatg		1260
		ggagaatgaa					1320
cataactctg	gagacaaatc	tgatattcag	gacctcctgg	agagtgtcag	gctggacaaa		1380
gaaaaagcag	agactttggc	tagtagcttg	caggaagatc	tggctcatac	ccgaaatgat		1440
gccaatcgat	tacaggatgc	cattgctaaa	ggtagaggat	gaataccgag	ccttccaaga		1500
		aagatttgaa					1560
ggatgaaaaa	gaaacagaaa	ggagtgacat	gaaagaaacc	atctttgaac	ttgaagatga		1620
agtagaacaa	catcgtgctg	ggaaacttca	tgacaacctc	attatttctg	atctagagaa		1680
tacagttaaa	aaactccagg	accaaaagca	cgacatggaa	agagaaataa	agacactcca	•	1740
		ctgcggaatg					1800
agtagtcatt	gcaaatgaca	ttaaatctga	agcccaagag	gagattggtg	atctaagcgc		1860
cggttacatg	aggctcaaga	aaaaaatgag	aaactcacaa	aagaattgga	ggaaataaag		1920
tcacgcaagc	aagaggagga	gcgaggccgg	gtatacaatt	acatgaatgc	cgttgagaga		1980
gatttggcag	ccttaaggca	gggaatggga	ctgagtagaa	ggtcctcgac	ttcctcagag		2040
ccaactccta	cagtaaaaac	cctcatcaag	tcctttgaca	gtgcatctca	agtaccaaac	-	2100
cctgctgcag	ctgcaattcc	tcgaacgccc	ctgagcccaa	gtcctatgaa	aacccctcct	• 1	2160
gcagcagctg	tgtcccctat	gcagagacat	tccataagtg	gaccaatctc	aacatccaaa		2220
cccctgacag	ccctgtcaga	taagagacca	aactatgggg	aaatccctgt	tcaagagcat		2280
ctgttaagaa	catcttcagc	cagccggcct	gcttccctgc	caagagtgcc	tgcgatggaa		2340
agtgccaaga	ccctctcagt	gtctcgacga	agtagtgaag	aaattaaacg	ggacatttct		2400
gcacaggagg	gagcgtcgcc	agcctctctg	atggctatgg	gaaccacgtc	tccacagctt		2460
tccctgtcct	Cttctccaac	ggcatctgtg	actcccacca	cccgaagccg	aataagagaa		2520
		agcattggcc					2580
ttgctgaagt	ggtgtcagaa	gaaaacagaa	ggctatcaga	atattgacat	tacaaacttc		2640
agcagcagct	ggaaa						2655

<210> 3680 <211> 4410

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(4411)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4411)...(749)
<223> similar to gi4240217 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3680
60
ctttcaaaaa tttccccagg ttgtgaaaag gtttgccaac gactctcagg gggtgtggtt
                                                                     120
ctaagctgca tcaagtgaaa caaatacaaa atgctgtccc tcctccctgg gctcggaagg
                                                                     180
cagtgcactt tetecetett aacageecag aetagaeggg tgaggaggte agtggeetgt
                                                                     240
gacccagggc caagctggga gtgtcccgca tagccttttt ctctgaccag tggggggaat
                                                                     300
tecatetace ettgagggeg tgetgggetg gggeeeegtt ttecacaace ageacatgtg
                                                                     360
ntggtgagaa aaaacccaag ggtagcttta tcaacagggc tgctggggcc ttaaataact
                                                                     420.
tgacagtgag tgttgggcog ggtcacagoo aggggaaagg acttaacaca gattgcooto
                                                                     480
ccaagccccc actggctggg cctaatttta ggattaccac gggaaaaaaa gctttgatga
                                                                     540
aagacaacag gaagtcaaca cagcagagag tggtgtggac aacccatgaa tgccagcctc
                                                                     600
accgcattcc catgccccac agttaacgat gacaacaaca gcaataataa taataataat
                                                                     660
aaaacaaagg tacaggtgaa aagcagcgct tggggtgtgc tgctgcaagc tggggaaggc
                                                                     720
gcgtgctcaa cttggatggg acacacctag tctttcttca agtccctgga ttcaaagagc
                                                                     780
ttcaaccgtt cttgcaccgt caggccttcc ttcagactct tggacctgat gtttctgagt
                                                                     840
tgccgggtga cacaggatet gtetttette aagaagteag ggttgetttt agattteatt
                                                                     900
atateatate eggacacegt ggeactgtea ggggaettet ecceeagtge tteegttgea
                                                                    960
geettgaget geteetteaa eetgetgatg teacagteag eettageett egegatgetg
                                                                    1020
agetetgtgt agatgtettt gtaettgtea ettgegtaet tettgteeeg eagtgeegte
                                                                    1080
tgcagétcat cettgaggga getaatetee tgttteaggt actgtattte egatteettt
                                                                    1140
accegeaata agacetetag tteataggea teettgeeet gtgcaagggg tgacecagtg
                                                                    1200
gecteeccae egeegteece aateaageaa egteegeaae egtgtgatet etgeageeag
                                                                   1260
geggttgtte ageteetggt tgtgggeatt gageteetgg tteteaeget ggeactgeeg
                                                                    1320
cagggeetge egeteggeet ecagegeetg ggecagatgg geatteteca ggeacttetg
                                                                   1380
cgagtactgc tecgagagga cetecaagtt ceaegetgea eegactgeag eteceteeag
                                                                   1440
gtactggcgc cgcagggcct caaacatccg aagttgacgc tgctgatctg ggaccgctgg
                                                                   1500
ctcttctccc agtcccgctc catttcctcc cggtgggcgt tcttcatggc ttcgatggct
                                                                   1560
gagatggtgg ccgctgtctc ctcggctagg aggcggtctt tctcttctcg aagtttctct
                                                                   1620
ageteceget ggtgetgeet etggagatet teaatettee ttetggtgeg tttetteeat
                                                                   1680
tgctgcaaac cctcgctcgc acgtggcctt aaggctctcc aagtccctct ggtacttctc
                                                                   1740
acgcagtgtg gccgcgtcgc cctccaggtc cttgtgtccc agctcctccc gcatgacatc
                                                                   1800
catctgggcc tccagctcct ggatgcgctc cctcagcccc gtcatggagt cagcctctcc
                                                                   1860
etgggtggcc tgccagttgg gggcaggggc tggcagggcc ttggggtgtg gcccctggtg
                                                                   1920
gaggcagagg gtgtcctgaa ggcacctcag gctctgcgag tagtgctcct gcagggtcct
                                                                   1980
cageteetee tegtggateg tetgeagete eeggacettg agetggaace tgteeteeag
                                                                   2040
ggtctgtatc tgctcaccat gatgcctctc catgtcctgc ctgtctctga ccgaggcatc
                                                                   2100
cagetggete aggaceegge tgegeteage etgeagtgtg eteteggtee tggteagetg
                                                                   2160
ctccaccaca caccgaatet ceteeteata eetgeeeege agggtgaaca tgeteatget
                                                                   2220
gtgcttgctc tctgcatcct ccagacactg ctgctgatgg tctagctggg cggccttggc
                                                                   2280
cttgagetet geatteteee tttcaacaat ggegateaea tecaggtaet egetettetg
                                                                   2340
cttgcggaga agctcctcat actcctccct cagggcccgg gctgcctgtg cctgctctga
                                                                   2400
gcaggagggc tcccgggttt gccaggactc cttgcagagc tggagctcct tctcatattc
                                                                   2460
```

```
tagooggatt otgoaggacg catagoaaac otgggootga ataatggoat ootgaaccaa
                                                                     2520
caatgaagaa tactgaccga ggcctcccaa acaagtgtta tacgagagac tctgggacac
                                                                     2580
ctggagaagc ttctggcaat ctctcagcga ttccacaggt ggcagagatg gtaaggcagc
                                                                     2640
cgctatctcc tctaagaggc tggccttctc cttcagctgc tgggcaagct cctcctgaat
                                                                     2700
agcaacaaag gccccagggc tctggtcaga cacatcgaag ggctcctgag agctgtctga
                                                                     2760
gtotoggood aggaettoto ctaaggggot caggtoccag gacagotgaa caccatotto
                                                                     2820
atggcccgct ggaagcctga gggcttccaa gacctgctgc atcactcttt caaagtctgg
                                                                     2880
ggtttggtag gctcccagga tttccctcag caggcatttg tgctgccgca gggccgtctg
                                                                     2940
ggtgccccgc agggtctcct ggatgctctg tagcctgcgg tggaacgact ccctcactga
                                                                     3000
ctgtgtggca aagctgagct ctgccctgac ccatgtggca ttggccagga tgggggccag
                                                                     3060
gccctgtggg atgctttgct gcccgtctcc tgaggcaccg actgcctctc ctcccagtgt
                                                                     3120
ccccaagtgc ttcctcagag actcaacctg gctccagaac tcaccatcca ctaggacctt
                                                                     3180
cctggcccag gtgtctacgg gggccccagc agattccatc ggtggctgtc ctgaccaaga
                                                                     3240
aateteatgg ageatteggg agaeatetga tgttgtgtte tteagggaat etgetatetg
                                                                     3300
gctgatcagc gaggcctcca gagcaatctg gtcagaaaga agcctcacct gctcctgctc
                                                                     3360
tgtcaactca gactgggage actgctgcag ggaggcagge ttcccattct cctcggtgcc
                                                                     3420
acctgtctcc agctgtgcac gggccccgcc atgggctggg gccggccagt gctgcagggc
                                                                     3480
ttggatggcg ctgacgagtg cactetecae actggccagg gaggetgcgc gtgcgtcctg
                                                                     3540
ctcatcctcc tggctggccc taggcagaga tctcagttgt tctcggcaat tttccaggca
                                                                     3600
catcagggcc tgactattct tgacctggaa gtccccaagc tctccaacat gcccttcaac
                                                                     3660
ectectggee etetectgee tetectgete cagetgggag gecagtgege caacetggag
                                                                     3720
caggetggeg eggagetget caegeagetg ggeeteggtg eeegeeeact ggtggtgeag
                                                                     3780
tgcgagcagt gcctcacggc tctgaccctg ctggctctcc agcctcacgg tcacgtcttt
                                                                     3840
gagettttee tetgtgaegt agagettggt etecagggag tggatgatgg agaggtaegt
                                                                     3900
gtcagagtcg ccagttgcag gcagtacact gggtgcaggc tctgaggaca tgctttcttc
                                                                     3960
cgagggtgac cggtcctggc tggtgtcgga agatgtgctg ctggtccagg tcttctcaga
                                                                     4020
cccttcgggg tgaatgtatc tttggcactg gattgtggag aaccggattc tttgcctttt
                                                                     4080
aacaccaggt geceettggt egagtttgge tgtgeeetge tgatggeeet eeetgteaag
                                                                     4140
cactteeact gaetttgggg geaccatget gtetteecta etggggetge cateacegta
                                                                     4200
ctettecece ggaggagece ecaggteete gteeteatee tegageettg tgtgtgggag
                                                                     4260
gcctagaggt gccctagtgg cttggactgg ttggcctggg agcaaagtgc catccctttc
                                                                     4320
tgtctcttca ggggtactcc gtggctcttc catgtccttt ggagattcac ttgcaaattt
                                                                     4380
ccttaaaatc tcttcttttg cctggagctt
                                                                     4410
```

```
<210> 3681
<211> 2752
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(856)
<223> similar to gi4406821 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3681

gcgaccgcca gcggctacac ggtacccgcg tgagaagctc aagtccatga cgtcccggga 60
caactataag gcggcagcc gggaggccgc gcgccgctgc cgcagccgcc gtagccgccg 120
cagccgcagc cgccgctgc gccgaacctt accctgtgtc cggggccaag cgcaagtatc tggaggactc ggaccccgag cgcagcgact atgaggagca gcagctgcag gaggaggagg 240
```

```
aggcgcgcaa ggtgaagagc ggcatccgcc agatgcgcct cttcagccag gacgagtgcg
                                                                      300
ccaagatega ggcccgcatt gacgaggtgg tgtcccgcgc tgagaagggc ctgtacaacg
                                                                      360
agcacacggt ggaccgggcc ccactgcgca acaagtactt cttcggcgaa ggctacactt
                                                                      420
acggcgccca gctgcagaag cgcgggcccg gccaggagcg cctctacccg ccgggcgacg
                                                                      480
tggacgagat ccccgagtgg gtgcaccagc tggtgatcca aaagctggtg gagcaccgcg
                                                                      540
tcatccccga gggcttcgtc aacagcgccg tcatcaacga ctaccagccc ggcggctgca
                                                                      600
tegtgtetea egtggaeece atecaeatet tegagegeee eategtgtee gtgteettet
                                                                      660 .
ttagcgactc tgcgctgtgc ttcggctgca agttccagtt caagcctatt cgggtgtcgg
                                                                      720
aaccagtget tteeetgeeg gtgegeaggg gaagegtgae tgtgeteagt ggatatgetg
                                                                      780
ctgatgaaat cactcactgc atacggcctc aggacatcaa ggagcgccga gcagtcatca
                                                                      840
tecteaggaa gacaagatta gatgeaceee ggttggaaae aaagteeetg ageageteeg
                                                                      900
tgttaccacc cagctatgct tcagatcgcc tgtcaggaaa caacagggac cctgctctga
                                                                      960
aacccaagcg gtcccaccgc aaggcagacc ctgatgctgc ccacaggcca cggatcctgg
                                                                     1020
agatggacaa ggaagagaac cggcgctcgg tgctgctgcc cacacaccgg cggaggggta
                                                                     1080
getteagete tgagaactae tggegeaagt catacgagte etcagaggae tgetetgagg
                                                                     1140
cagcaggcag ccctgcccga aaggtgaaga tgcggcggca ctgagtctac ccqccqccct
                                                                     1200
cctgggaact ctggctcatc cttacgtagt tgcccctcct tttgttttga gggttttgtt
                                                                     1260
tttgttcatt ggggggtttt tgttttttgg tttttgtttt ttttgattct atatatttt
                                                                     1320
cottggtttt gttgcctgtt aaggctgaac aatagaattg gccaggacct aggttctcat
                                                                     1380
attettggta tteeteetgg atggaaagge tgttggeate aataggggae agaggetgat
                                                                     1440
gctggagtgg ccagtagagg tggtggagca gagcacccat cttttaagtg gggctgtatc
                                                                     1500
aggctgggtt tatttaaaag caacaaaatg ttttggttaa gaaaattatt ttgctttcag
                                                                     1560
tgtaaatett egeagtgtte taaacaaagt teagtettet gettgeeeet tteeeteact
                                                                     1620
gatgtetgea ettggttgag gteteetgga geeteacagg etetgetgtt etecaettet
                                                                     1680
cacctgccat ccacgccctg caagetcatg caaacaccct ttetteetee tgcggcagag
                                                                     1740
ttgttcaggt tgcctgggca ggggcttaaa cagtgccagc ccctgccatc ccaaagctat
                                                                     1800
tgttaagccc cccaggcgtc ctccacccac gcccactagc ctgccatgtc cacagttcct
                                                                     1860
tgggctgctg aggggctagt gcagtggtcc tgacctctct tatcaagagc acacttcttt
                                                                     1920
getggttget cettttgage atatgegtgt gattatttgg aacagttaga ettgecaegt
                                                                     1.980
tgggtcagtt ttagaaattg tttctagcta gagggactgg tgtccttcca agtctagcat
                                                                     2040
ttggggtatg gaaaattgtt gtggtgtgtg gtagggtttt tgttttcttt tttgaqtttt
                                                                     2100
ttttccccct ttagtctccc tggctttttc ctttcccttc ccttctccac tggccagctt
                                                                     2160
gggcctcatc ctcatgtcat ccttctagga aggcgcctgc cccatcttgt ctgccggcag
                                                                     2220
catgcatcca aggccagage teaggeetge agactggget ggtgceteet eegetteagg
                                                                     2280
gtatgggagt tggtgaaggg gctttcaaaa aataataaga aaaaaaaggt aaagtctttg
                                                                     2340
gtagetteta tecaeteaga teetggaagg cageaaggtt ttgtggatet agatteatta
                                                                     2400
ggaatgtett ettgteagee aggeeaggae eegggettge eaagageaga ggeeeteeea
                                                                     2460
gcaaccagga taccaccact ttgggggctt tgtgtacaga ggtccgggtc tgagacctca
                                                                     2520
taggetgeag aaatetgggg cagecaccat caagaageee eteteagggg ceagaactee
                                                                     2580
tttgccagcg tggatttctc aagtcgggac tgcataatta aagcagttgc agttttattt
                                                                     2640
tttttacagc ttttttccca aaaatgattt atagttgtgt gtgcagcact tcgccctgaa
                                                                     2700
atgtgtgctc tacaataaac aaccaaatct aatatatttt gaaaaaaaaa aa
                                                                     2752
```

```
<210> 3682
<211> 2354
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (72)...(1700)
<223> similar to gi4691726 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3682
agccctgctc atggcagtga ggtgggctcc cagctgctga ggccacccag cactagtgag
                                                                       60
tgacttggca tttttatttt tgttcagatc acaagaatgg gcattacatc atcccacaga
                                                                      120
tggctgacag atctcggcaa aagtgcatgt ctcagagcct tgacttatcc gaattggcca
                                                                      180
aagctgctaa gaagaagctg caggcgctca gcaaccggct ttttgaggaa ctcgccatgg
                                                                      240
acgtgtatga cgaggtggat cgaagagaaa atgatgcagt gtggctggct acccaaaacc
                                                                      300
acagcactet ggtgacagag cgcagtgetg tgccetteet gcctgttaac ccggaatact
                                                                      360
cagccacgcg gaatcagggg cgacaaaagc tggcccgctt taatgcccga gagtttgcca
                                                                      420
ccttgatcat cgacattctc agtgaggcca agcggagaca gcagggcaag agcctgagca
                                                                      480
gccccacaga caacctcgag ctgtctctgc ggagccagag tgacctcgac gaccaacacg
                                                                      540
actacgacag cgtggcctct gacgaggaca cagaccagga gcccctgcgc agcaccggcg
                                                                      600
ccactcggag caaccgggcc cggagcatgg actcctcgga cttgtctgac ggggctgtga
                                                                      660
cgcctgcagg agtacctgga gctgaagaag gccctggcta catcggaggc aaaggtgcag
                                                                      720
cagctcatga aggtcaacag tagcctgagc gacgagcttc cggaggctgc agcgagagca
                                                                      780
ctttgcaccc atagatccac aagctgcagg cggagaacct gcagctccgg cagcctccag
                                                                      840
ggccggtgcc cacacctcca ctccccagtg aacgggcgga acacacaccc atggcgccag
                                                                      900
gcgggagcac acaccgcagg gatcgccagg ccttttccat gtatgaacct ggctctgccc
                                                                      960
tgaagccctt tgggggcccc cctggggacg agctcactac gcggctgcag cctttccaca
                                                                     1020
gcactgagct agaggacgac gccatctatt cagtgcacgt ccctgctggc ctttaccgga
                                                                     1080
teeggaaagg ggtgtetgee teagetgtge cetteactee etecteeceg etgetgteet
                                                                     1140
gctcccagga gggaagccgc cacacgagca agctttcccg ccacggcagt ggagccgaca
                                                                     1200
gtgactatga gaacacgcaa agtggggacc cactgctggg gctggaaggg aagaggtttc
                                                                     1260
tagagetggg caaagaggaa gaetteeace cagagetgga aageetggat ggagacetag
                                                                     1320
atcctgggct teccageaca gaggatgtea tettgaagae agageaggte accaagaaca
                                                                     1380
ttcaggaact gttgcgggca gcccaggagt tcaagcatga cagcttcgtg ccctgctcag
                                                                     1440
agaagatcca tttggctgtg accgagatgg cctccctctt cccaaagagg ccagcctgg
                                                                     1500
agccagtgcg gagetcactg eggetgetca aegecagege etaceggetg eagagtgagt
                                                                     1560
gccggaagac agtgccccca gagcccggcg ccccagtgga cttccagctg ctgactcagc
                                                                     1620
aggtgateca gtgcgcctat gacatcgcca aggctgccaa gcagctggtc accatcacca
                                                                     1680
cccgagagaa gaagcagtga cctctctccc cacaccctca cctgcaccct aggacctcac
                                                                     1740
tggccatagg agetgggcca etccagacat taatccccac eccaacagag ecaetggcac
                                                                     1800
aagtgeeett agtgetgeea caeteeetgg cagecaggtg ceetggtgee caeceetgte
                                                                     1860
gagcccctaa ggatggggag gtggggggc aggagcttct gtcccccaca ttccatgcac
                                                                     1920
ctcccctctg tatatagcat ctccccctc ctagtgagca ggggcctgca aggcatcact
                                                                     1980
cccagcccct cgccttctag ggcaccctca gcaaaggggc aggtggggac actccaagtg
                                                                     2040
gggcagctct ccgtacatgc gccccacccc catgagccag ttcagcccta ctgggggctg
                                                                    2100
agegggggea teceeteett tgtacatagt etecatggat gteeetgeee tgtagecace
                                                                    2160
ageceettge tgeteteeet ttaatgecat atggeeeetg eetagggeae aggeeeeaae
                                                                     2220
ctgtgtgctg gggtccccag cagcaaacac tggaaagtct gtttttttt tttcttctt
                                                                    2280
cttccccacc ccttaatttt aactttgtgg taactgagtg cccccgcgtg cctgcgtgtt
                                                                    2340
gagtgtgtgg gcgg
                                                                    2354
```

```
<210> 3683
<211> 2547
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc_feature

<222> (13)...(2535) <223> similar to gi452821 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 3683
cgatttegte tgggetetee gegggteaag eggaetttee tgtteegggg eeggaaggea
                                                                      60
aaggtgetgg tggegegggg agtgegegte aaggtgaacg aggeetaceg gtteegegtg
                                                                     120
geactgeetg egtacecage gtegeteace gaegteteee tggegetgag egagetgege
                                                                     180
cccaacgact caggtatcta tegetgtgag gtccagcacg gcatcgatga cagcagcgac
                                                                     240
gctgtgggag gtcaaggtca aaggggtcgt ctttctctac cgagagggct ctgcccgcta
                                                                     300
tgetttetee ttttetgggg eccaggagge etgtgeeege attggageee acategeeae
                                                                     360
eccggageag etetatgeeg eetacettgg gggetatgag eaatgtgatg etggetgget
                                                                     420
gtcggatcag accgtgaggt atcccatcca gaccccacga gaggcctgtt acggagacat
                                                                     480
ggatggette ceeggggtee ggaactatgg tgtggtggae ceggatgaee tetatgatgt
                                                                     540
gtactgttat getgaagace taaatggaga actgtteetg ggtgaccete cagagaaget
                                                                     600
gacattggag gaagcacggg cgtactgcca ggagcggggt gcagagattg ccaccacggg
                                                                     660
ccaactgtat gcagcctggg atggtggcct ggaccactgc agcccagggt ggctagctga
                                                                     720
tggcagtgtg cgctacccca tcgtcacacc cagccagcgc tgtggtgggg gcttgcctgg
                                                                     780
tgtcaágadt etetteetét tecedaadea gadtggette eçcaataage adágeögett
                                                                     840
caacgtetae tgetteegag aeteggeeea geettetgee atecetgagg eetecaacee
                                                                     900
agectecaae ecagectetg atggaetaga ggetategte acagtgaeag agaecetgga
                                                                     960
ggaactgcag ctgcctcagg aagccacaga gagtgaatcc cgtggggcca tctactccat
                                                                    1020
1080
taggacgete etagaattig aaacacaate catggtaceg eecacggggt tetcagaaga
                                                                    1140
ggaaggtaag gcattggagg aagaagagaa atatgaagat gaagaagaga aagaggagga
                                                                    1200
agaagaagag gaggaggtgg aggatgaggc tetgtgggca tggcccagcg agetcagcag
                                                                    1260
coogggooot gaggoototo toccoactga gooagcagoo caggaggagt cactotocca
                                                                    1320
ggcgccagca agggcagtcc tgcagcctgg tgcatcacca cttcctgatq qaqaqtcaqa
                                                                    1380
agettecagg cetecaaggg tecatggace acetaetgag actetgecea eteceaggga
                                                                    1440
gaggaaccta gcatccccat caccttccac tctggttgag gcaagagagg tgggggaggc
                                                                    1500 3
aactggtggt cctgagctat ctggggtccc tcgaggagag agcgaggaga caggaagctc
                                                                    1560
cgagggtgcc cettecetge ttecagecae acgggeceet gagggtacea gggagetgga
                                                                    1620
ggccccctct gaagataatt ctggaagaac tgccccagca gggacctcag tgcaggccca
                                                                    1680
gecagtgetg cecaetgaca gegecageeg aggtggagtg geegtggtee eegeateagg
                                                                    1740
tgactgtgtc cccagcccct gccacaatgg tgggacatgc ttggaggagg aggaaggggt
                                                                    1800
cegetgeeta tgtetgeetg getatgggg ggacetgtge gatgttggee teegettetg
                                                                    1860
caacceegge tgggacgeet tecagggege etgetacaag caetttteca caegaaggag
                                                                    1920
ctgggaggag gcagagaccc agtgccggat gtacggcgcg catctggcca gcatcagcac
                                                                    1980
acccgaggaa caggacttca tcaacaaccg gtaccgggag taccagtgga tcggactcaa
                                                                    2040
cgacaggacc atcgaaggcg acttcttgtg gtcggatggc gtccccctgc tctatgagaa
                                                                    2100
ctggaaccet gggcagcetg acagetactt cetgtetgga gagaactgeg tggtcatggt
                                                                    2160
gtggcatgat cagggacaat ggagtgacgt gccctgcaac taccacctgt cctacacctg
                                                                    2220
caagatgggg ctggtgtcct gtgggccgcc accggagctg cccctggctc aagtgttcgg
                                                                    2280
cegeceaegg etgegetatg aggtggaeae tgtgettege taceggtgee gggaaggaet
                                                                    2340
ggcccagcgc aatctgccgc tgatccgatg ccaagagaac ggtcgttggg aggccccccc
                                                                    2400
agateteetg tgtgeecaga agacetgeec gagetetgea eecagaggag gacecagaag
                                                                    2460
gacgtcaggg gaggctactg ggacgctgga aggcgctgtt gatcccccct tccagcccca
                                                                    2520
tgccaggtcc ctagggggca aggcctt
                                                                    2547
```

```
<211> 2349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)...(1151)
<223> similar to gi2674195 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 3684 ageggeeget tgeeegggta ceeegatege egaggeeeeg gageetteet eegetgggge 60 tcaggcagcg gaggagccgt cgggggccgg ctcagaagag ctgatcaagt cggaccaggt 120 gaacggcgtg ctggtgctga gcctcctgga caaaatcatc ggggcccgta gaccagatcc 180 agctgactca agcacagctg gaggagcggc aggcggagat ggagggcgca gtgcagagca 240 tecagggetg agetgageaa getgggeaag gegeaegeea ceaegageaa taeggtgage 300 aagctgctgg agaaggtgcg caaggtcagc gtcaacgtga agaccgtgcg cggcagcctg 360 gagcgccagg cggggcagat caagaagctg gaggtcaacg aggccgagct gctgcggcgc 420 cgcaacttta aagtcatgat ctaccaggat gaagtgaagc tgccggccaa actgagcatc 480 agcaaatcgc tgaaagagtc ggaggcgctg ccagagaagg agggcgagga gctgggcgag 540 ggcgagcggc ccgaggagga cgcagcggcg ctggagcttt cgtcggacga ggcggtggag 600 gttgaggagg ttattgagga gtcccgcgca gagcgtatca agcgcagcgg cctgcggcgc 660 gtggacgact tcaagaaggc cttctccaag gagaagatgg agaagaccaa ggtgcgtacc 720 cgcgagaacc tggagaagac gcgcctcaag accaaggaaa acctggagaa gacgcggcac 780 accetggaga agegeatgaa caagetggge aegegeetgg tgeeegeega geggegegag 840 aaactgaaga cgtcgcggga caagttgcgc aaatccttca cagcccgacc acgtggtgta 900 cgcgcgctcc aagaccgcgg tctacaaggt gccacccttc accttccacg tcaagaagat 960 ccgcgagggc caggtggaag tgctcaaggc caccgagatg gtggaggtgg gcgccgacga 1020 cgacgaggc ggcgcggagc gcggggaggc cggcgacctg cggcgcggga gcagccccga 1080 cgtgcacgcg ctgctggaga tcaccgagga gtcggacgcc gtgctggtgg acaagagcga 1140 cagegaetga geegeeeeeg etgeeaeeea eeccatteet egeteettee gaaetteete 1200 tttegeatte tetetegget egagetgget gagattttte taaattgaaa acaegeeece 1260 etececacae etecaggaae tecaetecea gtettagage tgttaggaee egatggggag 1320 gcagcccccg cagtggacag cccccgcttg gacacagtcc gagtggaatg ggaagggaat 1380 ggtcaatccc tgtcctggtt gtccaagtcg ggatctcaga ggaaattgca gtgattccac 1440 ggttaggccc ccctgggggg gctgccttcc cctcagcctc tccccacacc acccacccag 1500 etgetgteat teegeteact gagetettet teatteteac eetgateeet gggggaetea 1560 aagccaaaac tgcccaaaga ggaaagattg aatcctaaag gggatccttg cccccatggg 1620 aggececeta etagaaggae gtgaaageag ettttggggg aaaetgagge agtggggaag 1680 acagagcaga atgagccete accetggetg ggggtecage acaggetgta tetgcagagg 1740 gtcccagagg aacgctggag ccaagagaag ccctgggaag gaggggtggg gaacgacatg 1800 catgtgaggg atggcacact gatgtgttta tgcacctgta cacaggagcg catggccatg 1860 gctttggaaa ggagaatgga aaaatagaag aaggtcggcc gggcttggtg gcttaagcct 1920 gtaaccccag cactttggga ggccgaggtg ggcggatcac ctgaggtcag gagttcggga 1980 ccagcctggc aaacacccca tctctactaa gcgaaaaccc atctctacta aaattacaaa 2040 aattagctgg gcatggttgc gcatgcctgt aatcccagct actttggagg ctgaggtggg 2100 gagaattgct tgaacctggg aggtggaggt tgcagtgagc caaggtcgcg acactgcact 2160 ccagcctggg tgacagagtg agactccatc tcaccggacg gggatgagca tgcctgaaat 2220 cggcgctcct ttttaggctg acctgggggg aaccgacttt aacctgggag gtggaggttg 2280 tagtgttccc cttatgggac actgcactac aacctaggtg ggagagtttg gactccaact 2340 cttcttagg 2349

```
<210> 3685
<211> 3269
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3270)...(625)
<223> similar to gi2290534 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3685 60 ggggctttgg gatgctgacc cctctctgac ctggccgttt cgacctcagc cctgagttac 120 cctgcagcag gcatggacag gcggccgcct tgcctgtcgc agcttcctgg cagcagctgg 180 cettgeetgg accageetgt etgeeceage ggeeggaegt ggeeagetgg aatcegtget 240 gcgcgggcgc tccggccgtg gcagggacac ataggcccgc acatgcttag tttgttccag 300 ggcgtcccag tgacatcagg gaggggcaag gccaaggtgg gccacaggct ctcccagggt 360 aggactectg agtggegeee teeegaaagg ggteetgetg geeeeteace ettetgggge 420 cggtttcacc cacggggtgg gcagcaggag cacggagcgc ggggtgccac acacaggccg 480 gggggctccg cagaggaggc ccaaggtttt catgatcaga caatgcacat cctggctcca 540 ggtggacaga gcatggggat ggaggcagaa cgttctcaga cagcagtggc ctcctgggcc 600 gggaagccac gggtgtgtgg gggagccatg ggcgcaggga cacagaaggg cgtgcagcca 660 cactcatcca cgtgggtgta ggtgtgcagg atggctgagc cgttaggaca gtgcaagggc 720 acceptetect egtggacceg ceteteetgg cageaggtge actggtgetg catggeetgg 780 gcctcttgct gagtacttgg acgcttccgg ggcaggagcc cctcgcagaa ggtgatgttg 840 acctcggtct cgcagccctg gtgccacagg gatggtcgtg ttgatgcgga cttggacagg 900 agtectecte acaggagtag cagcageegg tttteetgag geteceetg cagetggaca 960 catctgggca ggatgcaggc tgtggggtca gcaaatggac tccaccctca gcctcacaga 1020 ggtacacggt gcagttgtcc acatggctgt tgacccaggt ttcattcagc tggactggct 1080 ggccatcggg cgtgaggcag gcggtctgga cgcactcccc acagcactgc ccggccactc 1140 tettgtacte aaageeetgg ggacaggtag tattgttgca ggcateetee tgacattgca 1200 ccgttgggtc ctgggtgtcc ccagagaggc aggtacacat gtggcaggga agggcgcctg 1260 ggaaggttgc accaaccccg tagaaggtgc cattgtacga acacagctga ggtctgcagc 1320 ggaaggtggg acagcagtcg coctectect gggtgcagat ggactcetge cetggeggge 1380 acacaggcag gctctggggg caggtggttg tgttgcacac gcacaccgtc tcggggcagc 1440 aggggttete ggeeegggge etggteaegg ttacgaagee gggaeggttg eaeggegggg 1500 1560 acacgcagga ctggcagttg ctgacccacc gctccccggg aaatttagga aacccatcgg 1620 gtcccacgca ggggcaggcc tgcacgcaga tgcccatgtg tgcgttgaag aggatctggt 1680 cctcagggca gaagcagccc tccgccatcc cctccagctg tgggctctgg ttcctagagt 1740 tgcaggtggc aggctgtatg gggccgcatg gcttgtacac tttggtgggt gggcaggtga 1800 ggtcgcacag gccaccggtt gcacctcgcc agtcactgca cactccccgg gcgcggcaga 1860 getetgegta ageeteeagg etetggeagg geaceteaag geggeeeetg eagtggtege 1920 tgatgcaggc gttgaagaat gggcccgggg gcagaagggt gtggcactca gcaaagacct 1980 ggctcagcat cagatcacag agcagctgtg gtgggcatgg ggtgggggtg ggtgtgctag 2040 acaccggggc tgcggggctg gcagtggggg gtgtgccagt cggggcccaa cagccatcct 2100 ttctgctgtc ggggaccagc cacgtcttgg ccatgtcctt gcaactggcg gcagtggttc 2160 cgtcccgctg gagacagtcg tccctctggt tgttggtgca ggtgccgcac tggccctcgg 2220 tgttgttgtg gaagaggctg tagggcagcc gggcctggaa cacttggcca ttgaaggtga 2280 cgctcacgcc cagggcagga atgtccacag ccatggtggt ggtccccagc acagacacaa 2340 gcacgccgtt cttgctgaaa ccgctgctca ccggaattgg gtcaaacagg atcaggccct 2400

```
ectectice atgraceatg gtgacagtga ggacgatate catggacttg tagtggatge
                                                                     2460
tgagggccgc gggggcagcg ggcggcagcg gcagtggcag aggccgtgca gtagtggttg
                                                                     2520
tecaggtaga ggetgagatt eccaaagegt geatggatet eteteatgag gacataggtg
                                                                     2580
cagttgcccc ggaaggtgta agaggtgccg tcaaaggtgg aatagtggga gccgcccac
                                                                     2640
atgetgeaga tgeactegea eteatagtgg aagteacagg getggetegg gteegacaet
                                                                     2700
ttgatgggca ggtgcttgtt cacgcaggtg acgttggcca caggctttgg gtccagcagg
                                                                     2760
acgacacggt tgtcacccac gcacctggcc accgtgcagt tctccagggt ccaggtctca
                                                                     2820
ttcacctgcc ggagagggat ggcattgtca cagccagggg caggggaggg cgaggacagc
                                                                     2880
ggggcggagg acactggcgg tggggaggtg ggacaggcgc cctggaagcg gtcaatgtca
                                                                     2940
cagtgctgat tgcacactgc gtagaaatgg cagccggctc ggtcggtctt attgtagatg
                                                                     3000
acttccccgg gcgagaaaaa ctgtccaaat gccctgcaga agcagggagt agaaaagtgg
                                                                     3060
gagctgggga agccagtggg tctcagggtg gtgaggactg aggaggacac agtggacacg
                                                                     3120
ctgaaggttg gcaggctgct ggggagcact gcaggggtgc gggtggtccc cacggtggac
                                                                     3180
gagctgggaa ccgtggaggc agtggctgtg ggcatagtgg ccatggtggt caccactttg
                                                                     3240
ggggtgtgag ctgttcccag agtggagga
                                                                     3269
```

```
<210> 3686
<211> 3307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (125)...(427)
<223> similar to gi4100164 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3686
 egeagagaet atetgagtat eteaagtgga tttatgttae eattteaaat aaggagttta
                                                                        60
 tatagcccgg gcaatgttaa ggtgttttaa taaaccaaag gacaaaaatt aagtaaactt
                                                                       120
 gaaagaatgt caactgaaat atctggggtt tttgaaaaca aaaataaaaa tttgccaagg
                                                                       180
 aaatacctat attgetettt ggtgtaacgg gaaactgege tgeetgtagt aageteatee
                                                                       240
 ctgcctttga gatggtgatg cgtgccaagg acaatgttta ccacctggac tgctttgcat
                                                                       300
 gtcagctttg taatcagaga ttttgtgttg gagacaaatt tttcctaaag aataacatga
                                                                       360
 teetttgeea gaeggaetae gaggaaggtt taatgaaaga aggttatgea eeceaggtte
                                                                       420
 getgatecta teaacateae eccattaaga atacaaagea etacattett ttatetttt
                                                                       480
 tgctccacat gtacataaga attgacacag gaacctactg aatagcgtag atataggaag
                                                                       540
 gcaggatggt tatatggaat aaaaggcgga ctgcatctgt atgtagtgaa attgccccag
                                                                       600
 ttcagagttg aatgtttatt attaaagaaa aaagtaatgt acatatggct ggatttttt
                                                                       660
 gcttgctatt cgtttttgtg tcacttggca tgagatgttt attttggact attgtatata
                                                                       720
atgtattgta atatttgaag cacaaatgta atacagtttt attgtgttac catttgtgtt
                                                                       780
 ccatttgctt ctttgtattg ttgcatttag tacaatcagt gtttaaactt actgtatatt
                                                                       840
 tatgctttct gtatttacca gctattttaa atgagctgta actttctagt aaagaattga
                                                                       900
 aaagcaaatc tcactaatga tacacagata gataaagcaa gtctatcaac attaaaaata
                                                                       960
 ctaaaaaata aagacacaca cagagcattt tagtgacatc cactacttat tgccgctatg
                                                                      1020
 agttagagtc tatcagtgtt cttgttataa ccccctattt tcaggggggt taaaaatcag
                                                                      1080
 ctttaaaaaa atacataaaa atttcatctt aaagcacttt cattttatac caacgtgaaa
                                                                      1140
 agtgccattt ttagaataac tttaaagctt aacaggtttc cttttaatat ccttttttg
                                                                      1200
 tgtgctcttt acttacacaa tggctttgtt ttgctttttc agccacaccc cttatgtgaa
                                                                      1260
 ctagtgcctt tgggtatcac gtaaaatttt ttccaaaggg ttactttaaa aatctgttac
                                                                      1320
```

```
cacaattatg agatgatttt taagtgataa attaaacttc ttcttgtata aattctgccc
                                                                     1380
agatetetee acaagagetg agggttteat aaetttatgg ettaataaat gtatgacaet
                                                                     1440
gaaaagattt gagtgtgaat ctactgaaat cactataatg cacattgaaq ctatgatggt
                                                                     1500
atttgagtag tgaggttact tttgatcgga gcaacataat gctcatagaa tcttctagaa
                                                                     1560
gaagagaaac aaagggattg ataaaatgct gagaactagt gattatatat ttttctgtat
                                                                     1620
ttacctgaca tttattttaa tgttcaaaaa gtaaacactt taagtttgat gtgttttact
                                                                     1680
eteteattgt tttaagtaat tgecaactea gaatacatea ttettagget gaaatttgte
                                                                     1740
tttccatttt ttaaggtgaa atagtactac cttacgtgat agcatacaaa gaagaaagct
                                                                     1800
ctagaaagag aaattatgga gaatgattat ttaaattaca attaaggaaa tgagaatatg
                                                                     1860
atcccctctt ccgagttgcc cacaaacttg cttctttgct tttgctccct gtaatagaac
                                                                     1920
tacttttcaa caaatctaat tttgcacggc accgttaacc atattttcac tacagcaaac
                                                                     1980
ttagtgctat gggttttctt tttctttgtt tttttcttga tcacttgtat aggaaacaat
                                                                     2040
attttccagt gttatttgca tatatattt gtccttccaa tatatgcatt acagatgaaa
                                                                     2100
attaaatgtt atacctgaat tcttgggttg gggccaaaat attaaggctg gaaaataatg
                                                                     2160
ctgggtgtgg gatttgtttt aaaacaaagg cttttattta tggaacatgg catgtggaat
                                                                     2220
ctgggatatt gcctcttatt tttaagaaaa tggttctgtg aaaagtgaat gatatgtatt
                                                                     2280
tttccaaatg cttcatggtt aggagtcttc aagttccatg ttccccagat ttgagatata
                                                                     2340
ctaaagaaag aaattcaaaa gtagctattt ggggcccaca aaaataacta ttattttagc
                                                                     2400
cttagagect tacacttgtt teatgaagag aaaggaettg cataaccaaa ataaacaaag
                                                                     2460
caagacaaat taaaaatatg tgggggagag atcagtgaaa agtggttttc ttaatgcagc
                                                                     2520
cctgctggtc cccattaaca attgcttgaa attcacatgg atgtaaaatt ataattgtca
                                                                     2580
ggatcttatt cagatgatct tttaaggttt aactggtttt gcttttgttt atctatatgt
                                                                     2640
caaaatactt gtaaattggg aacaaacttc tctcagcttc ttgaagttgt tcaactatcc
                                                                     2,700.
ttgccactgg aagaccaaac aaggttttca ctgctttttc ttttacataa tatgctgaga
                                                                     2760
attatttett atgettttta etacaaacaa aattacteae etggattaaa gattaaggee
                                                                     2820
ttaatctgtt tagattatct ttaatctcca tgaaatcgtg aaataagaca agaatagtgt
                                                                     2880
ttcagctgta ggccatttta cagctaattg cccataaatt gtagcattta ttgacctgaa
                                                                     2940.
gtactaagct aattgtcttg actactcaaa gcccctgaat tgttgtcaac tttccccttt
                                                                     3000
gtgttgggta gccctaacgt catttagctt gttgtctgat gcctccagta ggacacctcc
                                                                     3060
gatggagett tgatttetga geagegaaag etecetteet aagatgeate tegeatagge
                                                                     3120
tgcctatgat gaaggaccgt gcacctccac tccaacagag tgctgagttt aaaagttgac
                                                                     3180
ctgtgtttgt aatttcactt tcatcttgct taataaatat ctgctggatt ctttcattca
                                                                     3240
cttttttaca tttggattta tgtttttacc caaaggggtg ttcccctaaa aaaaaaaga
                                                                     3300
aaaaaaa
                                                                     3307
```

```
<210> 3687
<211> 2386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2387)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(1041)
<223> similar to gi2795825 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3687
 gtccgagagg agatggtttt tgaagccgtt ttgcgttggt gtctatcgtg ccgttgatct
                                                                      60
 gagaagacca ctgttacatg agctcctgac acatgtgaga ctccctctgt tgcatcccaa
                                                                     120
 ctactttgtt caaacagttg aagtggacca attgatccag aattctcctg agtgttatca
                                                                     180
 gttgttgcat gaagcaagac ggtaccacat acttgggaat gaaatgatgt ccccaaggac
                                                                     240
 taggccacgc aggtccactg gctattctga ggtgatagtt gtcgttggag gatgtgagcg
                                                                     300
 agttggagga tttaatcttc catacactga gtgctacgat cctgtaacag gagaatggaa
                                                                     360
gtctttggct aagcttccag aatttaccaa atcagagtat gcagtctgtg ctctaaggaa
                                                                     420
 tgacattett gtttcaggtg gaagaatcaa cagccgtgat gtctggattt ataactcaca
                                                                     480
gttaaatatt tggatcagag ttgcctctct caataaaggc agatggcgtc acaaaatggc
                                                                     540
tgtcctcctt ggtaaagtat atgttgtcgg tggctatgat gggcaaaaca gacttagcag
                                                                     600
 cgtagaatgt tatgatteet tttcaaateg atggactgaa gttgeteece ttaaggaage
                                                                     660
cgtgagttet cetgeagtga ctagetgtgt aggeaaactg tttgtgattg gtggaggace
                                                                     720
tgatgataat acttgttctg ataaggttca atcttatgat ccagaaacca attcttggct
                                                                     780
acttegtgea getateceaa ttgecaaaag gtgtataaca getgtatece taaacaacet
                                                                     840
gatctatgtt gccggtggac tgaccaaggc aatatactgt tacgatccag ttgaagatta
                                                                     900
ctggatgcac gtacagaata cattcagccg tcaggaaaac tgtggtatgt ctgtgtgtaa
                                                                     960
tggtaaaata tatateetgg geggaagaeg ggaaaatgga gaageeacag acactattet
                                                                    1020
ctgttatgat cctgcaacaa gtatcatcac aggggtaget gcaatgccca ggccaqtqtc
                                                                    1080
ctatcatggc tgtgtgacta ttcatagata caatgagaaa tgctttaaac tctgaagaca
                                                                    1140
ggatacetea eegaagaage cacaetgate caagatggga ggttttaaaa actetacagg
                                                                    1200
gggaacttca catatctcct ttgtgccata tgcaaaaaat agtaaaaata ataatttggt
                                                                    1260
geetttetee teaaaatate aatettteaa aetataataa ageettteet ataattgaaa
                                                                    1320
aaaaaaactt ttttgttaaa ggtaatgggg gttgttactt ggcctttgaa'gagtgtacct
                                                                    1380
ttgtaagtat ttgtaagaag tctatgtgaa ttaggaaatg tctgtctgca taccttttag
                                                                    1440
gagcgtgtga atggtgtctt cacttattat gtatgtttat ctgtatgtat attccttatt
                                                                    1500
ttgtcatata tgtagagaaa attgcatgac ttgaggcatc atttaggttg aagaagttaa
                                                                    1560
tgettagaat geattetagg agaaaaaate agttttaaaa acetttette ttaacaaagt
atatccagat tggttaattt tattgaaggg tttttttctg taattgataa aaatgtaatg
                                                                    1680
acaacaatto aggcatcata aaatactgaa ctattgtgac tttattotta gaattgotgt
                                                                    1740
cttacattaa acatgttttt agggggaagt taggtaggag atagaaaaat aagtqccct
                                                                    1800
1860
aaaaatgacc cactatggct ctcaaagttt ttatgcatca tctcttcaat cctctaagaa
                                                                    1920
agectetttt ettaactiga taaageagtg gaaacecatt tigeaatatt giittgigaa
                                                                    1980
aaacagggac agacagccag gtacagagac tcacacctgt actcccaact actcagcagg
                                                                    2040
ctggggcagg aggattgctt gagcccagga gtctgaggct acagtgagct atgaacgcac
                                                                    2100
acggcaccet agcetgggca acaggttgcg aaactgtete aagagaaaag aaaaagaaaa
                                                                    2160
atagggatag gttttccttc ctagcccagt agagtttgac ctcattagta tggtgctttg
                                                                    2220
ggtgaggacc tetteettga ttateceact ttetagtgaa cagetaaaat teetgagagt
                                                                    2280
ctctactgtt aaggtacctt taataggata aagcagggac cacctatctc agtggggtcc
                                                                    2340
attttctttt taaaattagt tatcttnaaa aaacttaggc agtagt
                                                                    2386
```

```
<211> 3455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (373)...(808)
<223> similar to gi3878110 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 3688

<400> 3688 agatatttaa gctatggttc cggtcccaaa cgattcccct tggtagatgt tcttcagtat 60 gcattggaat ttgcctcaag taaacctgtt tgcacttctc ctgttgacga tattgacgct 120 agttccccac ctagtggttc cataccatca cagacattac caagcacaac agaacaacag 180 ggagccctat cttcagaact gccaagcaca tcaccttcat cagttgctgc catttcatcg 240 agatcagtaa tacacaaacc atttactcag tcccggatac ctccagattt gcccatgcat 300 ccggcaccaa ggcacataac ggaggaagaa ctttctgtgc tggaaagttg tttacatcgc 360 tggaggacag aaatagaaaa tgacaccaga gatttgcagg aaagcatatc cagaatccat 420 cgaacaattg aattaatgta ctctgacaaa tctatgatac aagttcctta tcgattacat 480 gccgttttag ttcacgaagg ccaagctaat gctgggcact actgggcata tatttttgat 540 catcgtgaaa gcagatggat gaagtacaat gatattgctg tgacaaaatc atcatgggaa 600 gagetagtga gggaetettt tggtggttat agaaatgeea gtgeataetg tttaatgtae 660 ataaatgata aggcacagtt cctaatacaa gaggagttta ataaaaactg ggcagccct 720 tgttggtata gaaacattac caccggattt gagagatttt gttgaggaag acaaccaacg 780 atttgaaaaa gaactagaag aatgggatgc acaacttgcc cagaaagctt tgcaggaaaa 840 gettttageg teteagaaat tgagagagte agagaettet gtgacaacag cacaagcage 900 aggagaccca aaatatctag agcagccatc aagaagtgat ttctcaaagc acttgaaaga 960 agaaactatt caaataatta ccaaggcatc acatgagcat gaagataaaa gtcctgaaac 1020 agttttgcag tcggcaatta agttggaata tgcaaggttg gttaagttgg cccaagaaga 1080 caccccacca gaaaccgatt atcgtttaca tcatgtagtg gtctacttta tccagaacca 1140 ggcaccaaag aaaattattg agaaaacatt actagaacaa tttggagata gaaatttgag 1200 ttttgatgaa aggtgtcaca acataatgaa agttgctcaa gccaaactgg aaatgataaa 1260 acctgaagaa gtaaacttgg aggaatatga ggagtggcat caggattata ggaaattcag 1320 ggaaacaact atgtatctca taattgggct agaaaatttt caaagagaaa gttatataga 1380 tteettgetg tteeteatet gigettatea gaataacaaa gaactetigt etaaaggette 1440 atacagagga catgatgaag aattgatatc acattataga agagaatgtt tgctaaaatt 1500 aaatgagcaa gccgcagaac tcttcgaatc tggagaggat cgagaagtaa acaatggttt 1560 gattatcatg aatgagttta ttgtcccatt tttgccatta ttactggtgg atgaaatgga 1620 agaaaaggat atactagctg tagaagatat gagaaatcga tggtgttcct accttggtca 1680 agaaatggaa ccacacctcc aagaaaagct gacagatttt ttgccaaaac tgcttgattg 1740 ttctatggag attaaaagtt tccatgagcc accgaagtta ccttcatatt ccacgcatga 1800 actetgtgag egatttgeee gaateatgtt gteeeteagt egaacteetg etgatggaag 1860 ataaactgca cactttccct gaacacactg tataaactct ttttagttct taacccttgc 1920 cttcctgtca cagggtttgc ttgttgctgc tatagttttt aactttttt tattttaata 1980 actgcaaaag acaaaatgac tatacagact ttagtcagac tgcagacaat aaagctgaaa 2040 atcgcatggc gctcagacat tttaaccgga actgatgtat aatcacaaat ctaattgatt 2100 ttattatggc aaaactatgc ttttgccacc ttcctgttgc agtattactt tgcttttatc 2160 ttttctttct caacagcttt ccattcagtc tggatccttc catgactaca gccatttaag 2220 tgttcagcac tgtgtacgat acataatatt tggtagcttg taaatgaaat aaagaataaa 2280 gttttattta tggctaccta tgtgtttgta agcaggtata ttgtatatta gtgtattagt 2340 aatactagat aaatgaattt tgtctgggga ttaagattgg atagttaata gattaataca 2400 atcttttaat totgototaa tgotagoaaa ttggaaaatg tttaagtott tgacacttaa 2460 atttatctat atttttaaca aagttcttga acttagtatg gcaccggaac ctgttttgaa 2520 ttcagtcagg tttttactca agtaagtggt tgatttttt taagtcaaac tacactgaaa 2580 cttttatcct tttcttagat taatcttact ttttaaatgt atttacaata tacagcaagg 2640 tgattatttc aagagaatcc caaagtactt gaataagggc tattgtaaaa tttaaaagaa 2700 atatttatat atacacatat atacacatac acacatgtat atatatattc ttcataatgg 2760 aggacaatgt tttgcaatat ataaatcatt ctatttttgt aaattgtata tcactttaat 2820 tgaaaatgtt ctctactaat taatactgtg aaacaaaatt gatgttgttt aactagaagt 2880 tatgagtatc ttaactgcct ttattccttt tcaaaaagga aaaagctgta gaacattttg 2940 tagatgaaac tactgtttaa gattaatgaa ttaatattgt gaatgaaaat caaaatccat 3000 actttaaagg taatcatgtt actaacaacc tatttttgaa ttcataaaaa tttctttata 3060 aatgatgttt tgtgaacata gtaaaataga ccattatact atgtgtatgt ttgatacagc 3120

```
gtcgccaaaa ctagtgttct ttattagtgc ctctcacaaa agatcctgga tggaggagta 3180 agatgaaata ttatgctatt atatgatgct gtttgtaaag gtattaatgt actagtaagg 3240 tgttaaatga aaggaattag tactattcct gttgtaaagt tagattttgc atattgtatc 3300 tatcaaaata tgtttgggtt tagattttaa gttgtctact gagcagattt ctgcattggt 3360 tttccagtcc tgttaaaagt ttagaaactt catatgtgtc atcacagctt ttgtaaagaa 3420 agtatcctta atattttatg acattctacc acaaa 3455
```

```
<210> 3689
<211> 1266
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(445)
<223> similar to gi4530441 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3689 gcacaggtct atgtccggat ggactctttt gatgaggacc tcgcacgacc cagtggctta 60 ttggctcagg aacgcaagct ttgccgagat ctagtccata gcaacaaaaa ggaacaggag 120 tttcgttcca ttttccagca catacaatca gctcagtctc agcgtagccc ctcagaactg 180 tttgcccaac atatgggtgc ccattgttca ccatgttaaa gagcatcact ttgggtcctc 240 aggaatgaca ttacatgaac gctttactta aatacctaaa aagagggaac tgagcaggag 300 gcagccaaaa acaagaaaag cccagagata cacaggagaa tagacatttc ccccagtaca 360 ttcagaaaac atggtttggc tcatgatgaa atgaaaagtc cccgggaacc tggctacaag 420 gatgggcata attctaaaaa tgaactacaa agggttaatt tttattaaat gtatcaacaa 480 cettigtgaa giggitagaa taiggiaaat gaccccaaag tetaitgagg igagetigag 540 aaaaaaaaaa gaggagtttt ggaacaagtg cccatgatga gagaagaaac tttttgtgat 600 atttttctgc ttgtaagtat tatcaaatca actgtataca tgcactattt ccaaccatga 660 tttcagaaag acatgcatgt cagagaagag tgaaatattc atgtcttaac ttaagtagac 720 tgtttttaaa cagctggtcc agttttttt cctaacattg taccatatct atcatctgtc 780 aattactgtt actttaaagc taaagattac tttgatggcc cagctacatt tgcaatgatg 840 tgcacgtaaa cactgttaag aggttaaagc ttgtatacaa tctgttactg tgaaataact 900 aaattgggct ttaaaaaaat cttagtattt attgatcttc attcacatat acagttgaaa 960 tttaaaataa cagatggtta ttccaatgct gctgaaacct tttctaaaaa atacttgttt 1020 tgttggttga atgtgatgag aggcgcttct gggcagtctc tcttctctcc cacccqtctt 1080 tectecteeg agtacecett etecagettt gtactageca tgtaaaaece aaggttttet 1140 ttaaaacatc agaagagatc tcgtcctcca tgccccaaaa aagccaactc attggaggtg 1200 ttacccctgg gagcagtgtt gcatttgtct ttttgtcttt ttttgctctt tggaggatgc 1260 agaggc 1266

```
<210> 3690
<211> 1006
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (8)...(370)
<223> similar to gi1871612 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3690
gacatacact ttctgctttt cgttaatgat caattctctt gaccataatt cagggtctaa
                                                                       60
ttcttgaagc ttttggagaa ctaagggacc aactggacca agtcaaagaa gacatggaga
                                                                      120
ccaaatgctt catctgtggg ataggcaatg attacttcga cacagtgcca catggctttg
                                                                      180
aaacccacac tttacaggag cacaacttgg ctaattactt gttttttctg atgtatctta
                                                                      240
taaacaaaga tgaaacagaa cacacaggac aggaatctta tgtctggaag atgtatcaag
                                                                      300
aaaggtgttg ggaatttttc ccagcagggg attgcttccg gaaacagtat gaagaccagc
                                                                      360
taaattaaac tcagacccaa tcacctctaa aaaccaaaac cctacccctc tctctccctc
                                                                      420
teteaattte tetgetetet tggaaacatt ttgetgattt tgtgaattge cagegttgtg
                                                                      480
tgttttctgg gagcatcgaa gctctgtttc ggaagagctg tttcctcccc ccaccttttg
                                                                      540
tatttacttt gagactaaag actgaagaat aatctaaatt catactcaga caaaaaaagg
                                                                     .600
aattctggaa agaaaaccat tctggacact gtcataacac acatagatag attttcttct
                                                                      660
gagacteceg gagtettete gagetaegag acetteacag agacaegtgg cagecacaet
                                                                      720
cacccagcet etttatttca ecateetgga aggaaactgt etgtetaatg gteacagage
                                                                      780
actgtagcac ttaacagatt gccatggaca ccagttgcga agggaaatag tgccttacta
                                                                      840
tatgtgggtt gagctatgca gaagatacgt gcatgaaaaa acatctttat tttctttatg
                                                                      900
tegacettte tittettaga tigattitgt gaggittitt tittiteett tageettite
                                                                      960
tttagggggg gagggtaaaa aaagcagttt gcccttaaaa aaaaaa
                                                                     1006
```

```
<210> 3691
<211> 2781
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1437)
<223> similar to gil503988 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3691
atctcagagt ggcggaattc gccgggacca gccgctcggg gccgggctga tacagccgct
                                                                       60
teacegtgee eetgeeegeg accatggeet eeteegaggt ggegeggeae etgetettte
                                                                      120
agtotoacat ggcaacgaaa acaacttgta tgtottoaca aggatoagat gatgaacaga
                                                                      180
taaaaagaga aaacattcgt tcgttgacta tgtctggcca tgttggtttt gagagtttgc
                                                                      240
ctgatcaget ggtgaacaga tecattcage aagggttetg etttaatatt etetgtgtgg
                                                                      300
gggaaactgg aattggaaaa tcaacactga ttgacacatt gtttaatact aattttgaag
                                                                      360
actatgaatc ctcacatttt tgcccaaatg ttaaacttaa agctcagaca tatgaactcc
                                                                      420
aggaaagtaa tgttcaattg aaattgacca ttgtgaatac agtgggattt ggtgaccaaa
                                                                      480
taaataaaga agagagctac caaccaatag ttgactacat agatgctcag tttgaggcct
                                                                      540
```

```
atctccaaqa agaactgaaq attaaqcqtt ctctctttac ctaccatqat tctcqcatcc
                                                                      600
atgtgtgtct ctactttatt tcaccgacag gccactctct gaagacactt gatctcttaa
                                                                      660
ccatgaagaa ccttgacagc aaggtttaca ttataccagt gattgccaaa gcagatacgg
                                                                      720
tttctaaaac tgaattacag aagtttaaga tcaagctcat gagtgaattg qtcaqcaatg
                                                                      780
gcgtccagat ataccagttc ccaacggatg atgacactat tgctaaggtc aacgctgcaa
                                                                      840
tgaatggaca gttgccgttt gctgttgtgg gaagtatgga tgaggtaaaa gtcggaaaca
                                                                      900
agatggtcaa agctcgccag tacccttggg gtgttgtaca agtggaaaat gaaaaccact
                                                                      960
gtgactttgt aaagctgcgg gaaatgctca tttgtacaaa tatggaggac ctgcgagagc
                                                                     1020
agacccatac caggcactat gagctttaca ggcgctgcaa actggaggaa atgggcttta
                                                                     1080
cagatgtggg cccagaaaac aagccagtca gtgttcaaga gacctatgaa gccaaaagac
                                                                     1140
atgagttcca tggtgaacgt cagaggaagg aagaagaaat gaaacagatg tttgtgcagc
                                                                     1200
gagtaaagga gaaagaagcc atattgaaag aagctgagag agagctacag qccaaatttq
                                                                     1260
agcaccttaa gagacttcac caagaagaga gaatgaagct tqaaqaaaaq aqaaqacttt
                                                                     1320
tggaagaaga aataattgct ttctctaaaa agaaagctac ctccgagata tttcacagcc
                                                                     1380'
agtcctttct ggcaacaggc agcaacctga ggaaggacaa ggaccgtaag aactccaatt
                                                                     1440
ttttgtaaaa cagaagttcc agagcacaga aggtcatcat cacaagcaaa ctttattaaa
                                                                     1500
aaaaaactag aagtgtgctt tgattttgct gttatttgtt ttatcacttc tatatttgqt
                                                                     1560
gaacagccac agttactgat atttatggaa aagtactttc aagtacaagg tcaatacata
                                                                     1620
agccagagtg aatgatacta caagttgagc atctctaatt caaaaatctg aaatccagaa
                                                                     1680
gcttcaaaat ctgaatcttt ttgagcactg acttgacccc acaagtggaa aattccccac
                                                                     1740
ccgacacett tgctttctga tggttcagtt taaacagatt ttgtttcttg cacaaaattt
                                                                     1800
ttgtataaat tactttcagg ctatatgtat aaggtggatg tgaaacatga attatgtaat
                                                                     1860
tagagtcggg tcccgttgtg tatatgcaga tattccaaac ctgaaatcca aaacacttct
                                                                     1920
ggtccctagc attttggata agggatactc agcttgtacc tatatattca tatatattca
                                                                     1980
ctgttgttag aaatgtttaa gttgctgttc tgtgatgaat ctaaatcttt tctcttgcta
                                                                     2040
ccaagctatt gtcactgcag tgcattatac caaagagcga agtcagtgcc actgaaaata
                                                                     2100
cagaacccat taatatcgtg gctatctgat tacatttata ttccaagatg aacctttttt
                                                                     2160
atatatgcta aaaattttgg ggaatatgtt ttgggatgta ttatggagct aaaactctaa
                                                                     2220
cctcttaata gttttataga acttaaaaat tttttataca attacccaat tggtgatatg
atcttaagct tttgtgtcag attatttaat atgatgactt catgctttat tatgccttat
                                                                     2340
tatggetgae gtattaetgt ggtgaaacaa aatatettta aaagttaaaa cateeagata
                                                                     2400
tataagctat tttttcctaa ggataaagta cctttgagca tgagtgtatc acagctttca
                                                                     2460
ttaggaaaac ttttcattac atacttgttt aaactctgtc ttccagggta aaaataataa
                                                                     2520
ggttgaatca ttttattaaa aatacttttt aagaaaataa ctatgaacat ctgaatatta
                                                                    2580
aagatataaa aatgcacata attcatattt caggtggtat ttgcattcag tqccttactg
                                                                     2640
gtatteteag aacattttaa tgatttetaa catttettaa cagteataga tatataeatt
                                                                    2700
ttcatttttt gtacttgaat attctaaata aaactgacat ttactcttga caaataaaac
                                                                    2760
atatattac taaaaaaaa a
                                                                    2781
```

```
<210> 3692
<211> 2548
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (202)...(1816)
<223> similar to gi3875448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3692 eggaageett etetgggget geaaggaeet gageteaget teegeeeeag eeagggaage 60 ggcaggggaa agcaccggct ccaggccagc gtgggccgct ctctcgctcg gtgcccgccg 120 ccatgtgggc cgtcctgagg ttagccctgc ggccgtgtgc ccgcgcctct cccgccgggc 180 egegegeeta teaeggggae teggtggeet egetgggeae eeageeggae ttgggetetg 240 ccctctacca ggagaactac aagcagatga aagcactagt aaatcagctc catgaacgag 300 tggagcatat aaaactagga ggtggtgaga aagcccgagc acttcacata tcaagaggaa 360 aactattgee cagagaaaga attgacaate teatagaeee agggteteea tttetggaat 420 tatcccagtt tgcaggttac cagttatatg acaatgagga ggtgccagga ggtggcatta 480 ttacaggcat tggaagagta tcaggagtag aatgcatgat tattgccaat gatgccaccg 🤉 540 tcaaaggagg tgcctactac ccagtgactg tgaaaaaaca attacgggcc caagaaattg 600 ccatgcaaaa caggeteece tgcatetaet tagttgatte gggaggagea taettaeete 660 gacaagcaga tgtgtttcca gatcgagacc actttggccg tacattctat aatcaggcaa 720 ttatgtcttc taaaaatatt gcacagatcg cagtggtcat gggctcctgc accgcaggag 780 gagectatgt geetgeeatg getgatgaaa acateattgt aegeaageag ggtaccattt 840 tettggeagg acceeettg gttaaagegg caaetgggga agaagtatet getgaggate 900 ttggaggtgc tgatcttcat tgcagaaagt ctggagtaag tgaccactgg gctttggatg 960 atcatcatgc ccttcactta actaggaagg ttgtgaggaa tctaaattat cagaagaaat 1020 tggatgtcac cattgaacct tctgaagagc ctttatttcc tgctgatgaa ttgtatggaa 1080 tagttggtgc taaccttaag aggagetttg atgtccgaga ggtcattgct agaatcgtgg 1140 atggaagcag attcactgag ttcaaagcct tttatggaga cacattagtt acaggatttg 1200 ctcgaatatt tgggtaccca gtaggtatcg ttggaaacaa cggagttctc ttttctgaat 1260 ctgcaaaaaa gggtactcac tttgtccagt tatgctgcca aagaaatatt cctctqctqt 1320 teetteaaaa cattactgga tttatggttg gtagagagta tgaagetgaa qqaattqeea 1380 aggatggtgc caagatggtg gccgctgtgg cctgtgccca agtgcctaaa ataaccctca 1440 tcattggggg ctcctatgga gccggaaact atgggatgtg tggcagagca tatagcccaa 1500 gatttctcta catttggcca aatgctcgta tctcagtgat gggaggagag caggcagcca 1560 atgtgttggc cacgataaca aaggaccaaa gagcccggga aggaaagcag ttctccagtg 1620 ctgatgaagc ggctttaaaa gagccatca ttaagaagtt tgaagaggaa ggaaaccctt 1680 actattccag cgcaagggta tgggatgatg ggatcattga tccagcagac accagactgg 1740 tettgggtet eagttttagt geagecetea aegeaceaat agagaagaet gaetteggta 1800 tetteaggat gtaactggaa taaaggatgt tttetgttgg acatgtactg aaaattaaca 1860 catgtagtag cottaaaatt ttagacttot ogaacatgag gotgitacag taatttttt 1920 aacactgtgc attgtacttt tctaccttaa aaaaatcagt gaggatattt atttaatgaa 1980 catcaattcc ttttaaattt tcttagagaa atttctctgt ggctcagttt taccacccat 2040 aaageggaga cagtaattta tggttateet ttetgaeeca caaagtatga aaagttetgt 2100 aatctgtaaa ctcagttctg taatctgtat tattgagatg attaatataa agttgtattt 2160 teactgaaat gattgttttg etggttatge ttggtgatat tttageggge ttatttttga .2220 aaggcatetg ttaetteagt ggcataaagt geeeteacae tgetgtgeag ceateaceae 2280 cattcatctc cagaatttgt tctcagtccc aaactgaaac tataccattc aaacaacagc. 2340 getecceatt teececteec ecgagedeat gacateteet tattattatt ttttttttga 2400 gacagggtgt ttetetgttg eccaggetgg agtgeggggg ggtgateteg geteactgea 2460 acctccgcct tccaggttca agcgattctc ccacctcagc ctcctgagta gctggaatta 2520 caggtgccca ccaccatgtc tggccaag 2548

```
<210> 3693
<211> 3923
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (121) ... (1223)
```

<400> 3693 tttcgtgcag ggagaccact tagaggctgc tgctctagcg caggctcagg gcactagggg 60 cttgggccag agtggtgatg ccagaggcga gaagatgctg ctgagttctg gctatgtttt 120 gecetggace catecaagga eccetgeetg aaggtaaaat geageettea eaaagtgtgt 180 gtgacccagg actaccagac cgccctgtgt gtcagccgca agcacctgct ccccaggcaa 240 aagaagggga acgtggccca gaaacactgg gttggacctt cgaatttggt caagtgcaag 300 ccctgtcccg tggcacagtc agccatggtc tgcggctcag atggccactc ctacacatcc 360 aagtgcaaat tggagttcca tgcttgttct actggcaaaa gcctcgccac cctctgtgat 420 ggggccctgt ccctgtctcc cagagcctgg agccaccaaa gcacaagggc agaaagggag 480 tgccttgcac agacaaggag ttgcggaacc ttgcctcccg gctgaaggat tggtttggag 540 ctctccacga ggatgcgaac agagtcatca agcccaccag ctccaacaca gcccaaggca 600 ggtttgacac tagcatcctg cccatctgca aggactccct gggctggatg ttgaacaagt 660 tggacatgaa ctatgacctc ctgcttgacc cttcagagat caatgccatc tacctggata 720. agtacgagec etgtateaag cetettttea actegtgtga eteetteaag gatggeaaac 780 ctttcctaaa caatgaatgg tgcctactgc cttcccagaa ccctggaggt ctccccttgc 840 ccagaatgaa atgaacagaa ttcaagaagc tgagtaaggg gaaaagcctg ttgggggcct 900 tcataccteg gtgtaatgag gagggctatt acaaagccac acagtgccac ggcagcacgg 960 ggcagtgctg gtgtgtggac aaatatggga atgagttggc tggctccagg aaacagggtg 1020 ctgtgagctg tgaagaggag caggaaacct caggggattt tggcagtggt gggtccgtgg 1080 tectgetgga tgacetagaa tatgaaeggg agetgggace aaaggacaaa gaggggaage 1140 tgagggtgca cacccgagcc gtgacagagg atgatgagga tgaggatgat gacaaagagg 1200 atgaggtcgg gtacatatgg tagtgcccac aagaaagagg acacaagttt tgcacaaaat 1260 tgcaagtcac ttcctattcc tgcatttgta tctaagactc caaggcacca aggtcttttt. 1320 tecattgttg etetetatac eegacetaag gtttggaaga caactgettg tteccagagg 1380 attctgattt tgcatatgtt tgtatgggaa aaagggtgtt gtgttttttt ttttgttgtt 1440 gtttattttt tggataggga agtcattggc ttaattagag cctccttcct ttctgtgaga 1500 tttttccaac aagcatgtga tttacgtgga attctgacag tgcagggagc ccccaccctc 1560 ttaaatgtca aagacccttt ttgattaccc acactggtgg ttattacagc atggttccca 1620 gccttacagt gtctaagtgc ttctcttgtg tcctgtagat gttgtgaaaa agaaaaaaac 1680 aaaaaataca ccacactgta ctttttcccc ctgcccccgt tactgccgqt qattattatt 1740 aaaaattagt ttttttcaca tcattatatc tggcttccta taaacaacag ccttaattca 1800 gtcaagactc cctttgggga attcatttta ttaaaaattg gtgtctggat acttccctgt 1860 acatgcataa atatgcatgc atgtacagaa agactgtatg tgtgtgcctt gcacacacac 1920 ccatacctct cagaaaaagt gggtatctta aaaactcgaa aaacaatgat aaatttctca 1980 gcttgtccag acctggaaca aaatttctgg aataagaaat ttgtattaaa gtccttttt 2040 2100 agagttactg aaagcctctg attgagaaaa aacctccgtc tgcctaaatc acttttctcg 2160 cagaagccat gcgactccca cacgacacgg gcagcttcac aagccatctc tttcatttct 2220 gcttgaagcc cccttggctg cagcaatcct gtctggccat aggtttcttc cttccttacc 2280 tacttcaagg ggctttttct aagggcatgg cacacatatc ttcctgtttc tctggaggag 2340 taccatgggg ttccttaaaa gaagaaaatt tctaattctg aactcaatgt tttgctttta 2400 etecettiet actgacaaat catgataagg geacaaaage tgtacagatt tttttttta 2460 accactcaat cccaaatgga ggcctacaaa gaacatcgta ataacacatg gaagcaaacc 2520 ctgggttttt aagagccaaa ttctgtcccc cccctccact ccccccaagt gacaagatac 2580 taatgaagaa agttetteac catagtgttt gttttaacta aacteattgg agtetagtte 2640 caaatttggg tagggtcatc atctctacat tccttaggat ttctctccct atcaagctgg 2700 cecagataca agtaccaaac agtagtetet gaagtteece cattteette agtaccagte 2760 tataagctac tgtccgccac tgattttcat ctatcagggt gtcctaatca gaatcagcca 2820 cccaagcaag cctctctggc ccacatatct atctcttgcc ttcccccatg aacttcagcc 2880 tgtccacaca aaagccacat aaactcaagc aagaaatatg ttcagccaaa acatgattat 2940 agtggcagct gaccaatccc ccatcccaaa ttgaccattt agatgtacca actcacctta 3000

```
aattagcatg ttccaatcca gtcqqcattq cctgaataca gtaqcatcat acctataqtt
                                                                 3060
ggtcttagat aagaaatgaa ctacttgata tagcaaagtc ctttggcttc gtaaataacc
                                                                 3120
ctgaggtttt gtacttactt tccccatagg aagacagacc ataggcaaac tctgttttgg
                                                                 3180
gateteaact ceateacett tgttteaata ttttttttet etettgaaca aaactgagat
                                                                 3240
aatttagaaa acaggtgctt aattgcaata aaattactat gaagtatatt aaaaatcacg
                                                                 3300
acattgtaaa atctcacttt agatcatcaa agaaaaccat tgttactatc tcctttgagc
                                                                 3360
ttaggaaaat gtacaagaga acaaattaaa attgaaaaat tgatttcact tagaaaaact
                                                                 3420
tctaggaaca gggtgaacca ctgattttaa tttgcctaat tatcttatga caagtatcaa
                                                                 3480
attaagatga cacttaaaga toottagcat taacttaatg atggagaaga gtgotcaaca
                                                                 3540
gacagttccc agtaaggtaa tgagatgcca ttttcagaga cattctaaga agatattttg
                                                                 3600
attcattaaa acattaaata aaaagccctc ctcagattgg aacccccaaa tcgatggagc
                                                                 3660
3720
tetttaatae ttteeatgag taetaaagat tgtaatgagt taeettatee ttagaagtag
                                                                 3780
aatgittgct tictictict tggaaatggt cctccaaaaa gtccacttgt accagtgaca
                                                                 3840
agaagtcact tgtatagtga'ccaagtacac ataaaatact gattataaaa atattgtaat
                                                                 3900
aaaccacttc ctcatttgat acg
                                                                 3923
```

```
<210> 3694
<211> 5352
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5353)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5354)...(1402)
<223> similar to gi3327080 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3694
ttttttttt ttaagatttg attttcttt atttgtcggc actaaaagac agatagctgt
                                                                       60
gatgaagagc aattggctgg tagctcgtgc ctcaccaaga gtttagcaac gttaatcagt
                                                                      120
gaatgcagaa cagcttccat tctacctgag gcctagatct gagatcgctg tgaaacatta
                                                                      180
aagtgaccct caccatactt gttttcccac tcagatacac attttatttc atcaacacat
                                                                      240
ccttgatttc ctattacttt ttttccaata taacaaaatg ttttagacga tatatatgaa
                                                                      300
aaaactaact getgtaggtt aggaeeteat tataaaatat tggtgaetgg geaceategt
                                                                      360
tgacgaacga ccacgatate etnaccaaag ggagecaatg agetgttggg acaaacgegt
                                                                      420
caagggctga accaaaattg tgacgctctc agcgcaactt tgatctggaa ctcttgacag
                                                                      480
gtgggcatcc aacatccctg ctccttgacc ctctgcagga ttccaggaag ggctcccagt
                                                                      540
gaaggtcatc agggctccgt acacagggca ccgtgggggg nagggcctat ggtcacttca
                                                                      600
tagcctgggg aatggctgtc catgtggggc actgcccatc cactccagtg gtggtgtgac
                                                                      660
ctcagecace egecaceett geaggacteg ggeatgeect ggecacatga teaegtagga
                                                                      720
ctgttttctg ggtggtaata gttgattttt aaaagcttag ttggtcagat catggactgt
                                                                      780
gaccctctgt gaagtgttag ccccaaatat ttgaggaaga agaatccagc agttttacta
                                                                      840
cctaacaaag ccacctttga aaagcctccc aatttttttt cttactacca aaacacacag
                                                                      900
catcatggag catatcacat tcagattgtt ccatctgatt catatgtttt ttctaaaatt
                                                                      960
```

```
caaaagatet taaateagta agtagtttea tecatetgta tgtggtaaaa gteteaaagg
                                                                     1020
tecenaaaat eagteetaag geatgattee tttttaettt geeecataa atataattaa
                                                                     1080
gtgtgaagtg ctgggctccc agcatttaat agtccccatt aacctgccca acaagaatcg
                                                                     1140
tttaattage aacttaagat attecagagg ccaaaacaca ttteettggg gcacaegagg
                                                                     1200
ctgcggcagc gacacagcat cttctccttt cctttcaagc cgttatacag gaacacaccg
                                                                     1260
aaaatcaact gtgcgcattt tggcctgtag acaagaaagt aacaccaaaa cttgatgttc
                                                                     1320
ctggctatgc agactccttg agtgacgcct gtgggcatat tacaggtggg tttctgcaat
                                                                     1380
tetetggeet etgtteatte acaegageaa gggeacettt eteagteteg eageeeetgt
                                                                     1440
gccggagcgg atggcgtcca tcaaggcttg ccttgcgtct gcggtgttgc tgagggtgcc
                                                                     1500
cgtgctgaac ctggaggccg teettggtgc agagagagec tgggagggtg gagggggtgg
                                                                     1560
tgggggaatg gctggtgggg acagaagacc aaggtcttct agcagaggac tttccgagcc
                                                                     1620
ctgtgcagag agtgcggcat ctcggaagct ctggagctcc tcagaagcag aggatgccac
                                                                     1680
ettectcagg etgeaggtge egetgtgeee geggataget geeageagtg cagategtte
                                                                     1740
gecetetgee teegtgtagg acagtttege tggeetgeee teeeeggtgt gttetgeegt
                                                                     1800
cttgcgtagt ctgtccttcc ctcccgcaga gtggatggct tccatcaggg cagagtgcag
                                                                     1860
ggatgtgtct tttgggactg gtctctggac aacaggtttg aattttttct tcggcccaaa
                                                                     1920
aatgctgggt ggccaaatac tgtctgtttc atttccatct gtagagaaca cactgggctt
                                                                     1980
ttcctctctt tctaggagaa tgtggctttc tgtgccagac cctcctggag ggtgggaagg
                                                                     2040
ctcgccgtgg cctggggcgc gcacagagcc attgaccagc tccctgctgc aggcctgagt
                                                                     2100
gtcagatgtg tgtggagggg gtgggtctgt accatcaggt gcgcgtctgg gctcagatgc
                                                                     2160
tgagetggee teetggetac ttgtgetttg etttecactg aaaccacage tetgteccae
                                                                     2220
agaaacacga tccctctggg aagactgaac cagtgagaaa caggagcttc tgtggatagc
                                                                     2280
agcaggtetg teetgagtag acaaetteet gtgtgggeea atgaeeteee eectaggagg
                                                                     2340
ggctccccct gccaaatctt ccccgtggtt gttgggagga gtgacacagg gccactgggc
                                                                     2400
accatectic catectigis tetetgagis tgggetggat greetsteat etticacagi
                                                                     2460
gacaggtggt gcagccagca ctggcgcctt gcctgcataa cccttctcgg cataaccgtg
                                                                     2520
tggcctcacc acatcagcat ggacttttgg ggctcctatg cgcttggcaa tggcagaggc
                                                                     2580
cacatactgg ctggacgttc ttctctgagg cttgagaaat gtgacttctg tggtgtgagc
                                                                     2640
tgctggcacc ctcacgtgac ccatgcccat ggtgggggc tggtttctcc cctccctag
                                                                     2700
ggggttccgg ccctcatggt gggcagactt ctgctggggc gatattggct tggggtctgc
                                                                     2760
ttggagtctg ctctctggat tctgcgtctg cgtgggcaca ggggtggagg ggggtcccct
                                                                    -2820
ggcagagete tetgagggte ggcccaggtg tttttccaca gagttgcace tecagaacte
                                                                     2880
tetgaettte ecaatggget gagattetge tteaggeaca gaegaagaea gggaaatgat
                                                                     2940
cctgatgccg gtggcgtgag gactcaccaa gttccccagc tcgtcaatct taatggctcc
                                                                     3000
ggtggagagg gacacatete tgtegtaaca tegeatetet gactttggag gaatgatttt
                                                                     3060
atacgttgtg aggccgtgct taagtctgta gcttttccct gggttttggc ctcgttggtg
                                                                     3120
ccatgatgtt ggtgccaagg cagcgttttt atcgttgctg tccttttcat tcaccggttg
                                                                     3180
ggaattcact ctctctgtgg cttgagtcct ctccccgtca gcacagccat acactttgtc
                                                                     3240
tttcactttt gcatttaggt tgtctgtgtg aagattcaac gcaaaattat gtttctcctg
                                                                     3300
ggcgccgttt ccattagatt cccatcttta gagatgttag ataaggccac acggattcct
                                                                     3360
tttccgatgt catgggaagc ggggtgcagg gcaggtactt cctcccttgc cttttcatgg
                                                                     3420
ggctggctgt gctcagcttg aagtggcgcc agggaggctc tcctgctggc aacaccctcc
                                                                     3480
gagtcgaaag acccagcatt gttgtttcta ttggaaaaca accccgaatc cacaggatca
                                                                     3540
totgaaactt cocctatgaa tgttactggg attgcatctg tgtcgccgtg agggatcatg
                                                                     3600
gcatcctgtg ggcagtggtt ggatgcacca tggatggagc tggtgaggga gctggtgtct
                                                                     3660
gtttcatagc tgtcttccat ttcttccagg tcttcatcaa gttctgcaag ggttttacgg
                                                                     3720
aactctccag caattaatag gtcttcttca tcatttgagg ctgtgacagc tttttcagtt
                                                                     3780
ctcagatgtg agttctcaga gccattcttc tcccacaagg ggctcttctg gggacccagg
                                                                     3840
tetggggtte cagegaggte etggteactg cagtetteet ggtetgtgge ceaettgtet
                                                                     3900
ttgtatttca tgctgtcctg ctgcgagtcc agagagacga tgtctgaggg ggaactcatc
                                                                     3960
actectgagt ceteggtegt gteeteegae geaaaacage tgeeaactga caeggtetee
                                                                     4020
teegeetetg acageacetg eggggeteea teegggetge agtggetgee agaececagg
                                                                     4080
ggcaggetta ceategtget ettectgtte tecteettat ecteagtgeg gttggggate
                                                                     4140
aggggactcg gtggtggtgg ctgtggtgga gggggagctg gcgctcgccg cttcttcttc
                                                                     4200
tgtaaatcaa tctgtgaccc aagagatacc ttttccgatg ccttgtcttg cacaggtggc
                                                                     4260
cctgaacctg gaggaggagg ggctcggcgc ttcttcatct ccgacttcac ggacacccct
                                                                     4320
gagatgetge ceagegagag ggatggacce agegtaagag aacgtgagtg catggatggg
                                                                     4380
```

```
gagttggggg tcgttaaaca gcccttacta ttgcttcttt tattaacttt gaaaaatccc
                                                                     4440
agaaattttt tettetett atetgtetea teattgeeaa gtgatgattt eetaaaggtt
                                                                     4500
totottotgt tgtoccacgo gtagagotoc tttatocoga gotogttoag ggaottggao
                                                                     4560
agetecaget ceteteegge aatgitigtee etgaggagaa ceaegigete tgggetgaee
                                                                     4620
tcacactttg cacaaatgac tgggagaata ttctggagag gaacctcagg gctcacatgc
                                                                     4680
acaacagett tttgtgteeg caggtaatte acgaecaaac geacagattt eteaggeace
                                                                     4740
ttagggggac caggettaac ettetettea ggaacttttt ettteagaaa cacagtatge
                                                                     4800
acattcaggg tcccaatcaa agtatttggc ttaaaactca aaggttgttg ggtttctgaa
                                                                     4860
gaccgaattt caagggcatg gtgggatgga ttcaggtggt tctgaaggca aagttcaacc
                                                                     4920
agtaggteca teategeatg geteceattg ageaegetee tettetecag eccaetagge
                                                                     4980
aggaccacgg tgacgtccat ggtgctggcc ctcagcgcct ccttcatgcq aaccaaqttc
                                                                     5040
tgctgcgacc cgagggcccc atcgtggggg ggcttctggt cactgtgcac atgcagagtg
                                                                     5100
geageettte caggaggtgg gggageacga geetteatet teeteeeggt egggggettq
                                                                     5160
gccgccgagg cgcgcgcc gtccatggtg ccgggggccg ggacgcgggc ggtgctccgg
                                                                     5220
geoegeegag teaggegetg getacegeeg ceacegetge egeceteatt caetttttee
                                                                     5280
gegetgaece ategteetee caegegggee ggeggaggae ageggeggag egeggeggae
                                                                     5340
ggaaggggct gg
                                                                     5352
```

```
<210> 3695
<211> 803
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (479)...(684)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3695
acgtacgtat gagcaaccgg cctttatttc ccgggacgac gatttcttct gagaaagaac
                                                                       60
gacaggttca gagacgccgc taggattaag tttaagactt cgcgagaaca gaatttcttt
                                                                      120
tggcacctcc tctccgcgcg ttcttggggt gaggctgggt aattgttcct gcagggtggt
                                                                      180
gggtgatagt ggccagttga ctgcgactgt gtttgggtgg tgggaagcct gaagaaaagg
                                                                      240
ttgtttctta ccggtcgctg cctcagggag gtagtgcggt agaattttcc gctatgggtc
                                                                      300
atteteggtg teegegggga agggegtgae aacgaeggge gtgaeggega ageaacagtg
                                                                      360
tetegagage getgeegeee ggagggegee aggagaagtg egteegagae geegegegt
                                                                      420
gatgeteetg aaaaegtetg eeeggegtag egggaaeeea geatgatttt eaqqaqtete
                                                                      480
tgttgcccag gctggaatgc aatggtgcgg tctcggtcac tgcaacctct gcctcccggg
                                                                      540
ttcaagcgat tatcctgctt cagcctcccg agtagctgga attgcgggca tgtgctacca
                                                                      600
cacctggcta atttttgtat ttttagtaaa gacggggttt ggccatgttg gccgggctgg
                                                                      660
tetegaacte etgacetgag gtgatetgte egeeteagee teecaaagtg etaggattat
                                                                      720
aggettgage cacegegeee ggeetattte tgagtgttta ttgtaaaaac tatagttttt
                                                                      780
aaagtttgcc agatgcaata aaa
                                                                      803
```

```
<211> 917
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (918)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (679) ... (388)
<223> similar to gi2879865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3696 tttcgtccta aatttgtgca agaaatggca ggcttattct atctgaaggc ttcaaaaaaa 60 gatacacaac atgtaaccag gttcaaatat tctgggagat cccccaaaa aggaaataac 120 caaaataacc aaaaaaatga agaaagtgcc taaaacatga tacagcattt tagagccctt 180 tcagatacaa ggcagagaaa ggtgtaaagt agaaaatatc cggatcttca gtaatttcca 240 aaatggtcca attcctcagt tggctgcagg gcagctggca gatccttgct gctgctcctg 300 ggacagagec actaagtetg etecteggga cacaageeet caggeeetga getgagtgea 360 ectetecett eccettetet ttteettege tecattteee actecacaaa ggtgteaaag 420 agacttggcc aggcctcatc ttcactgtag ttgctgaggt cagggccaat cacctgagtg 480 aagttaagga acatgttcca agtgtcccgg gagatgccct tgatccccga ggggttctct 540 gttaggaagt ttagccattg gtccaatacc ggaggattgt tctgggtaaa gactagtttc 600 cacagggcaa tggctatttc ccgatgcagt gaccgctgcc cttcttcaga gtccagggcc 660 aaactgaaat gtaaaccggt agagatcctt gaatttatcc tcttgtttgg cttctgttaa 720 gagggetagg ggaacettge acagatttee gtteaatget gttttgeact tattgntttg 780 caggocatto aaaaaattoo tttootgoaa caggaaaggg aaaagggaca tttattoatt 840 attaaattat atttttacag ggcattntac tngtggttta ggngcagggt tttcaggccg 900. ntggtttgat ttggatt 917

```
<210> 3697
<211> 2094
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1589)
<223> similar to gil469169 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3697
agacgcaaga tggcggctgt ggtgctggcg gcgacgcggc tagctgcggg gctcgggttc 60
ttggggctgt tcgcggctga ggtttggacc tcctgcgtat agacggttta gtagtggtgg 120
```

```
tgcctatccc aacatccccc tetettetee ettacetgga gtacccaage etqtttttge
                                                                      180
tacagttgat ggacaggaaa agtttgaaac caaagtaacc acattggata atgggcttcg
                                                                      240
cgtggcatct cagaataagt ttggacagtt ttgtacagta ggaattctta tcaattcagg
                                                                      300
atcgagatat gaagcgaaat accttagtgg aattgctcac tttttggaaa aattggcatt
                                                                      360
ttcgtctact gctcgatttg acagcaaaga tgaaattctg cttacgttgg aaaagcatgg
                                                                      420
gggtatetgt gaetgeeaga cateaagaga caceaceatg tatgetgtgt etgetgatag
                                                                      480
caaaggettg gacaeggtgg ttgccttact ggctgatgtg gttctgcage eeeggctaac
                                                                      540
agatgaagaa gtcgagatga cgcggatggc ggtccagttt gagctggagg acctgaacct
                                                                      600
gcggcctgac ccagagccac ttctcaccga gatgattcat gaagcggctt acagggagaa
                                                                      660
cacagttggc ctccaccgtt tctgccccac agaaaacgta gcaaagatca atcgagaggt
                                                                      720
gctgcattcc tacctgagga actactacac tcccgaccgc atggtgctgg ccggcgtggg
                                                                      780
cgtggagcac gagcatctgg tggactgtgc ccggaagtac ctcctggggg tccagccggc
                                                                      8.40
ctgggggagc gcagaggccg tggatattga cagatctgtg gcccagtaca ctggggggat
                                                                      900
tgccaagcta gaaagagaca tgtccaatgt cagcctgggc ccgaccccca tccccgagct
                                                                      960
cacgcacate atggttggac tggagagetg etectteetg gaggaggact teateceett
                                                                     1020
tgcagtgttg aacatgatga tgggcggagg tggctccttc tcggctggtg ggcccggcaa
                                                                     1080
gggcatgttc tccaggctct acctcaacgt gctcaacagg caccactgga tgtataacgc
                                                                     1140
gacctcctac caccacaget acgaggacac tggcctcctt tgcatccatg ccagcgccga
                                                                     1200
cccaagacag gttcgagaaa tggtagaaat catcacaaag gagtttattt taatgggcgg
                                                                     1260
aaccgtggac acggtggagc tggaacgagc caagacgcag ctgacatcaa tgctcatqat
                                                                     1320
gaacctggaa tccaggcctg tgatcttcga ggatgtgggg aggcaggtgc tggccactcg
                                                                     1380
etccagaaag etgeegeacg agetgtgeac geteateege aacgtgaage eggaagatgt
                                                                     1440
gaagagagtc gcttctaaga tgctccgagg gaagccggca gtggccgccc tgggtgacct
                                                                     1500
gactgacctg cccacgtatg agcacatcca gaccgccctg tcgagtaagg acgggcgcct
                                                                     1560
gcccaggacg taccggctct tccggtagaa ccgctccccg gcctgacaga cccagggagc
                                                                     1620
tgcagctgga gcccgttccc gtgcgtgtta gtttggacac gaatttagtc taaaaagctg
                                                                     1680
totggttgta taaacggtgc aaacaatgtc gccacagcac ccacgcggtt tgcattcttt
                                                                     1740
tggaactcaa tgtgccgatc agtggagtca gtatcgagcc tgaccaccgc aagccaggaa
                                                                     1800
gcaggtgaag tgcccagcgc tggagtgcag cgtgccacga ggagggcggt cggtgcttcc
                                                                     1860
ctcctcgggc tgtgggcaca tggggccccg caggttcctt ggaggagccc tgagctggga
                                                                     1920
ggcagcaaag gctgacctat caaagcctcc cggaggccac cgtgctgggt accaggactc
                                                                     1980
acctetgaca ageaggagaa ggtaagggee eggteagete eaaggagege geteeaegeg
                                                                     2040
cgtgcacaca gcttccctgg taataaagag ctggcatctt tcttaaaaaa aaaa
                                                                     2094
```

```
<210> 3698
<211> 2054
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1623)...(571)
<223> similar to gi2443338 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
cgtgagatgg ggacctccag gcggccactc tggtcctggc tactgatcct tgcacttctt
                                                                      300
ggtcctcagt tccttcctgg tcccgtctct ggccctggtc ccctctggca acgtcccct
                                                                      360
gettggeteg geeteecaee tecateetgg cetegggtgg eeceetegge teetggggae
                                                                      420
tetgetecce teccagteeg gaggteccag gggggetatg gettetetga gaetteccee
                                                                      480
ggagccctgt cactcgtgtt cacacggggg aaggggtgcg tgtggcagaa gcagctgtat
                                                                      540
aaatacgggt gcgggaaagt ccctccgggt cacttggaga gtttgctgat gacgcggatc
                                                                      600
aacgctgcat tctcatcctt gaggcgctgg ttgtcagcgc ggaggtcaga cagggccttc
                                                                      660
agetectect ccagetetge ggeettgegt tecagggeee tgegetegaa tetetecagt
                                                                      720
tecaggaggg etggeetete agegaagegt tettgeetet gegtggeeeg etceagetee
                                                                      780
accttgaget gegecageeg cagegtggte teggteaggg cetegegaag eegetegtte
                                                                      840
tecetgegea getetgeata cagegteeta aageeteegt etggetette egattetgge
                                                                      900
traggttetg ggttgaggte cegetgecac egetgeetge gggccgaggg geegeetee
                                                                      960
agggtgctgg actcctggct gcggtcagcc ggctccgcct cctcccctc cgcaggcccc
                                                                     1020
ctdcactect ttccgacctt gcggtgctcc ctggccgcct gcggtcccgg accetgcccg
                                                                     1080
tegggegeet etgetetetg ggeagggetg teagagttet ceaeteeagg gaegeggge
                                                                     1140
cttcgggaag ggtccaggct ctgcgccggc ttctctgact ctggggcctt ccctgcagcc
                                                                     1200
ttetetgeet cetteaggte tgtaagagte acaccetgtg tggaceteeg agaetggege
                                                                     1260
atgagacggg agcgagcttt tctctgggat tccgactcct catcccgcac aggcatctgg
                                                                     1320
taggacetee gteggteeeg ggagteeget gggggegeeg tggaggetgt ggggaegttt
                                                                     1380
ggettegetg gggatteagg eteeggaate etggagggag gegaggagtt eteeaageaa
                                                                     1440
ggaggagget tggtgacete agacaggaca gagggeteeg geagettegg ggagggggte
                                                                     1500
ggggtaattc tggcaagacg gagctccttg gcctgagtgg aggtcccttc cagccaggag
                                                                     1560
gaggaageeg agegetgeag eccageeeca ggggeteect eegetgteeg eettteaggg
                                                                     1620
ggacccaggg caccagaact ccctgtcttc aggaggccaa agcgcctgga gaagggggcc
                                                                     1680
tottcaagca ogggactott agggotgggg tgoggogggg aggagacgcc attgagggtt
                                                                     1740
ctgggttctg cagggggtgg ttcggtggga ccttcttccc cctcatcctc gtcctggatg
                                                                     1800
gggggccccc cagccccacc aggccggcgc tecttggaca agtcctggag ggaaatcttc
                                                                     1860
tegegaetge teagaegaea caeagagete ettetgtgte tgetgetaga gggegettgg
                                                                     1920
ggctcctggc cccggctctg gcaagtttct ttttggttcc gaaggtcctc gtgtttccgg
                                                                     1980
gccagttect ccaacagget cagtacttec ggacgegtgt gtcgacgegt gaatteegge
                                                                     2040
ccgatactca gaag
                                                                     2054
```

```
<210> 3699
<211> 1202
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1203)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (53)...(825)
<223> similar to gi5326919 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3699
ccggtagaag cccgcaattc ttgtgtagac ccacgcgtcc gcggacgcgt gggtggaaga

```
gcaggcccag gagctgcccc cagggactgt gctcacccgg aactgcaccc gctgtgtctg
                                                                      120
ccacggtgga gccttcagct gctccctcgt tgactgtcag gagtgccccc tggggaaacg
                                                                      180
tggcagcagg tggccccggg ggagctgggg ctctgcgagc agacgtgcct ggagatgaac
                                                                      240
gccacaaaga cccagagtaa ctgcagttca gctcgagcct cgggctgcgt gtgccagccc
                                                                      300
gggcacttcc gcagccaggc aggcccctgc gtccccgaag accactgcga gtgctggcac
                                                                      360
cttgggcgtc cccacctgcc tggatctgaa tggcaggagg cctgtgagag ctgcctctgc
                                                                      420
ctcagtggga ggcctgtctg cacccagcac tgctccccac tcacctgtgc tcagggcgag
                                                                      480
gagatggtgc tggagccagg gagctgctgt ccctcttgcc gcagggaggc tccggaggag
                                                                      540
cagtogocot cotgecagot cotcaeggag ottogaaact teaccaaagg gacctgttac
                                                                      600
ctggaccagg tagaagtgag ctactgcagt gggtactgcc catccagcac ccatgtcatg
                                                                      660
ccagaggage catacetgea gageeagtgt gaetgetgea getacegtet agaeeeggag
                                                                      720
agccctgtgc ggatcctgaa cctgcgctgt ctgggtggcc acacagagcc cgtggtgctg
                                                                      780
ccggtcatcc acagctgcca gtgcagctcc tgccagggtg ggtctgggca gggaggggac
                                                                      840
ggggcaggag cctgggcaag gacccagtgt tgtgaaccag acccaggaac acacgtgtag
                                                                      900
etecteacte cateettett cettgagtee ttecagteca egttttteet tetteteggt
                                                                      960
gttcttgtta atttcatctc ctatcatgca tacttgtggg tgtctggggt agttgcacct
                                                                     1020
agttcaaacc ccagetcate tgttteettt gttteettge tcageeteee tgacateate
                                                                     1080
nnnnnnnn nnnnnnnn nnnnnnnnc caattgggac ccccagttgg gaggccaggg
                                                                     1140
ggaaaatttg ggttaattgg accceggaac etteggggtt taggggaace eteceeeee
                                                                     1200
                                                                     1202
```

```
<210> 3700

<211> 1738

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1502)

<223> similar to gi2546979 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 3700
atggtaacgt ggctttacag atttttaccc acttcaaata tggccgccaa gctccgttct
                                                                        60
cttttaccgc ctgatctacg gctacaattc tggcttcatg cccgcctcca aaagtgcttc
                                                                       120
ctctcgaggg gttgtggttc ttactgcgca ggcgcaaaag caagtcctct tccgggcaaa
                                                                      180
atggcgatgg gactaatgtg cggacgccgg gagcttctgc gcttgctaca gtccgggcgt
                                                                       240
cgggtccaca gcgtcgcagg gccctcgcaa tggcttggga aaccgctgac cacacggctc
                                                                       300
ctattcccag cagccccgtg ctgctgtcgc ccacactacc tcttccttgc ggcttccggc
                                                                       360
ccccgcagcc tcagtacctc tgctatctct tttgcagaag tccaggttca ggcccctcct
                                                                       420
gttgttgctg caactccctc acccacagca gtacctgagg tggcttctgg agagactgca
                                                                      480
gatgtagtcc aaactgctgc agagcagagc ttcgctgaac tggggctggg gtcatacacc
                                                                      540
ccagtgggac tgatccagaa tttactggaa tttatgcatg ttgatctggg cctaccttgg
                                                                      600
tggggggcca ttgctgcatg tacagtcttt gcccgctgcc tgatttttcc tctcatcgtg
                                                                      660
acgggccagc gagaggcagc caggatccac aatcacttgc cagagatcca gaagttttcc
                                                                      720
agtogaatca gagaggocaa gttagoagga gaccatattg agtattacaa ggottootog
                                                                      780
gagatggcac tttaccagaa aaaacatggt attaaactct ataaacctct cattctccct
                                                                      840
gtgactcagg coccaatott catotootto ttoattgott tgagagagat ggccaacott
                                                                      900
cctgtgccca gcctgcagac aggtggcctc tggtggttcc aggatctcac ggtatccgat
                                                                      960 ~
cccatctaca tattaccact ggcagtcact gctacaatgt gggctgttct tgagctaggt
                                                                     1020
```

```
gctgagacag gtgtgcaaag ttctgacctt cagtggatga gaaatgtcat cagaatgatg
                                                                     1080
cccctgataa ccttgcccat aaccatgcat ttccccacgg cagtgtttat gtactgqctc
                                                                     1140
tectecaatt tgtttteeet ggteeaagta teetgtetee ggatteeage agtacgeact
                                                                     1200
gtacttaaaa teeceeageg tgttgtacat gaeetggaca aattacette eeaeggggaa
                                                                     1260
gggctttcct agagagcttc aaaaaaggct ggaaaaatgc tgaaatgacg cgtcagctgc
                                                                     1320
gagagcgtga acaacgcatg cggaatcagt tggagctagc agccaggggt cctttacgac
                                                                     1380
agacetttae ecacaaceet etectacaae etggaaagga taaceeteee aatateeeta
                                                                     1440
gcagccagca gcagcagcag caaaccaaag tcaaagtatc cctggcacga cacacttggc
                                                                     1500
tgacttatgt tetgtgegea ttetggeagg aattetgtet etteagagae teateeteaa
                                                                     1560
aacaagactt gacactgtgt cettgeeeca gteetaggaa etgtggeaca cagagatgtt
                                                                     1620
cattttaaaa acggatttca tgaaacactc ttgtacttat gtttataaga gagcactggg
                                                                     1680
tagccaagtg atcttcccat tcacagagtt agtaaacctc tgtactacaa aaaaaaaa
                                                                     1738
```

```
<210> 3701
<211> 3561
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3205)
<223> similar to gi3676530 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3701
atggatgetg egggaagggg etgeeatttg etgeeeetge eageggegeg eggaeetgee
                                                                       60
egegeteetg cageegeege egeegeegee geeageeege eeggeeeetg cageggegee
                                                                      120
geotgegete cotecgegge egeoggageg ggegecatga acceeagete eteggegga
                                                                      180
gaggagaaag gggcgacggg cggcagcagc agcagcggaa gcggcgccgg gagctgctgc
                                                                      240
ctgggcgccg agggcggcgc ggacccgcgg ggcgcagggt cagccgcggc ggcgggggcc
                                                                      300
getgeeetgg acgageeege ggeegeegge cagaaggaga aggaegaage getggaggag
                                                                      360
aagctgagga acttaacttt ccggaagcag gtctcgtaca ggaaagcaat ctcccgggca
                                                                      420
ggcctccage atetggctcc tgcacatece etcageette etgtggcaaa tggtccagee
                                                                      480
aaggagccca gagcgacttt ggactggagt gagaatgccg tgaatggaga acacctgtgg
                                                                      540
ctggagacca acgtetcggg gagacetetg etacettgga gaggagaact gecaagteag
                                                                      600
atttgcaaaa tcagctctca ggaggaagtg tgcagtctgt aaaattgtag ttccacaacc
                                                                      660
gcctgcattg aggagctaga aaagattaat ttcagatgta aaccaacatt tcgagaaggg
                                                                      720
aggeteaagg gteaacaaga gaaaattttg taegteatea etgggtgeae aggegtegge
                                                                      780
aggaggggaa atgtaagcag tgtggtaagg gcttccagca aaagttctcc ttccacaqta
                                                                      840
aagagattgt ggctatcagc tgttcctggt gcaagcaggc gtttcacaat aaggtgacct
                                                                      900
getteatget geateacatt gaagaaceet geteeetggg ggeteatget getgttattg
                                                                      960
tecegeeeae ttggateatt aaggtgaaga aaceteagaa etecetgaag getteaaate
                                                                     1020
ggaagaagaa gagaacaagc tttaaaagaa aagccagtaa aagagggatg gaacaggaaa
                                                                     1080
acaaaggtcg teettttgtg ataaaaccca tetettetee teteatgaaa eeettgettg
                                                                     1140
tatttgtgaa teecaagagt ggaggeaace agggaaceaa agteetgeag atgtteatgt
                                                                     1200
ggtacctgaa tccacggcaa gtctttgatc tttctcagga agggccaaaa gatgcgcttg
                                                                     1260
aattgtatag gaaagtacca aatctgcgaa ttctggcctg tggtggggat ggaacggtgg
                                                                     1320
getggateet tteeateetg gatgaactge agetgageee teageeteet gtgggggtee
                                                                     1380
ttcctctggg gactgggaat gacctggctc gaactctcaa ctggggaggg ggctacactg
                                                                     1440
atgaacctgt ttctaagatc ctgtgtcaag tggaagatgg gacagttgta cagctagatc
                                                                     1500
```

```
gctggaacct ccatgtggaa agaaaccccg acttgcctcc agaagaactt gaagatggcg
                                                                     1560
tatgtaaget ceetetgaat gtttteaata actaetteag cettggattt gatgeecatg
                                                                     1620
tcacactgga gttccatgaa tccagagaag caaatccaga gaaattcaac agtcgttttc
                                                                     1680
gaaataaaat gttctatgca ggggcagctt tttctgactt cctacagaga agttctagag
                                                                     1740
atctatccaa acatgttaaa gttgtttgtg atggaacaga tctcacccca aagattcagg
                                                                     1800
aactgaagtt ccagtgtata gtatttttaa atatacccag atattgtgct ggcacaatgc
                                                                     1860
cctggggaaa cccaggtgat caccatgatt tcgaacctca gcgtcatgat gatggttata
                                                                     1920
ttgaagtcat tggatttacc atggcctctt tggcagccct gcaagttggg ggccatggag
                                                                     1980
agaggetaca ecagtgtega gaagteatge ttetaaetta caaatecate eccatgeaag
                                                                     2040
tggatgggga gccctgtagg ttggccccag ctatgattcg gatctccctg aggaatcagg
                                                                     2100
ccaacatggt acagaagagc aagaggagaa catccatgcc tttactcaat qatccccaqt
                                                                     2160
ctgtcccaga tcgtctgagg atccgggtga acaaaatcag tttacaagac tatgaaggat
                                                                     2220
tccactatga caaggagaaa ctccqaqaaq cttctatttc aqactqqtta aqaaccattq
                                                                     2280
ctggggaact agtgcagtca tttggagcga tacctctggg tattctagtt gtgcgtggag
                                                                     2340
actgtgattt ggagacttgc cgtatgtaca tagaccgcct acaggaggac ctacagtcag
                                                                     2400
tttcttctgg ctcccagaga gttcattacc aggaccatga aacctccttc cccagggctc
                                                                     2460
teteageaca gaggetetet eeteggtggt getteetaga tgacagatet caggaacatt
                                                                     2520
tgcactttgt gatggagatt tcccaagatg agatttttat tctggaccca gatatggtgg
                                                                     2580
tgtcacagcc ggcggggaca cctccgggca tgcctgacct ggtggtggaa caaqcctcgq
                                                                     2640
ggatctcaga ctggtggaat cctgccctgc ggaaacgcat gctgagtgac agtgggctgg
                                                                     2700
ggatgatage tecetattat gaggaeteag atetgaaaga teteageeae teeegegtge
                                                                     2760
tacagteace agtetettea gaggateatg caattttgea ggeagtaata getggtgate
                                                                     2820
ttatgaaget aatagaaage tataaaaatg gaggeagtet getaatteag ggaceagace
                                                                     2880
actgttcact cettcactae geagetgaaa eeggeaaegg ggagattgtg aaatatatee
                                                                     2940
ttgaccacgg accttccgag ttattggata tggcagacag tgaaacgggt gagactgcac
                                                                     3000
tgcacaaggc tgcctgccag cggaaccggg ctgtgtgcca gcttctggtg gatgcaggag
                                                                     3060
catctctgag gaaagacgga ctccaagggt aagacacctc aagaaagagc acagcaggcc
                                                                     3120
tggggaccca gacttggctg cgttaccata gaaagccgtc agaactataa ggtcattggc
                                                                     3180
catgaggacc tggaaactgc tgtttgaccc tggtattcgg gcaaaaqaqq acatqaqcaa
                                                                     3240
gcgtatcaca tctgccctcc ctgcaattgg gcagctcccc tggaagaagc tgatggaatt
                                                                     3300
catatatctg tetetetet geaagattet acetgagace atgecactag ettttaaggg
                                                                     3360
ctaccaagat gtacaacaga acatgatagc ccattgagaa ggaggcagga tacctggaga
                                                                     3420
tttgtggaat acagtacgag ttccacaaaa tttgatcctt attgcttcca gcaagtagca
                                                                     3480
tgaacttctg tgttcacctg tataatttat tttaaagatt caaaggatgt tcgtataaat
                                                                     3540
ggcactgctc catcctccaa a
                                                                     3561
```

```
<210> 3702
<211> 2580
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2581)...(1593)
<223> similar to gi5731802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3702
gaataccatt aaacttcaaa gaatcttcgc ttgtgcttaa aaataatgct gtcaaattgc 60
ttcatacact ttataagact ttaggcaaga aacattacta atggtatcat aaataagtat 120
```

```
tataacttta ttaaaatgaa aagacaatat tcaaaataat gcaacaaaat gaataaaatc
                                                                       180
 ctttgtccaa tactgtacac ataatgcaga aatcagtgca tttttcttaa gcatgtttta
                                                                       240
 accttcattt agttcatact aaaatataat aagctttaaa tagctcaaat aatattcaqc
                                                                       300
 agtttaaact gtaaacagct tqtttaactg ttaaqagaac attgcagtaa tqtacctctq
                                                                       360
 ttagtgagca ccttctcttc tgtgcttatc tcttcaagat aaatacatgg aaggatgtga
                                                                       420
 aaatcggaac accaactatg tgtctcactg catctaagtg aagcagccac agctqtqaqa
                                                                       480
 gttttcaaag cagaaagatg ctgatgtgac ctctggaatt cagacatact gagctatggg
                                                                       540
 tcagaagtgt tttacttaaa aagcaaacaa tccccaggaa atactgaata ggaaccagca
                                                                       600
 acacaaggcc agettgtgtt gtatgtttat taatacagte taaaaaaaaa ageaaaacca
                                                                       660
 caacacacat ccccaaacaa taactctcaa tcacataget aattgettca ttattttqta
                                                                       720
 aaactgacat cctaacactg gcacctagaa tacttttcca tctgagtcta acgtacccca
                                                                       780
 ctgcctctaa tacggcccgc actacgatga gctacttcag tgggtgggac caagcaggaa
                                                                       840
 ctgtaaggga .aaattagtca ctagttctat tatcgtttta tttttcaaga tgtgtgacag
                                                                       900
 gtacaggtga caatatggtt gccaagtaac ctgctctccc tccctcaaca agacgcaaca
                                                                       960
 tgaaacctgg aagtatgagg cettggtatg atttttaacc taagcaggta cacccatggt
                                                                      1020
 aaagaatgga taccctgccc tccatggaaa agattgcctg caaaaataaa tggaacaaaa
                                                                      1080
 tagaaaaggc ctaaaagcca gaaatcttca aacttactaa acaaaaatat tttttaatga
                                                                      1140
 ttctgatcta aacaatactg tatcttcttc catttgctca attttcagtc tatcaggact
                                                                      1200
 catttctcca gcttgagttt attattctga atatatatta ctctacgata gtaactaatt
                                                                      1260
 ggttaacctg cagctatggt ctatggttat accacaagtt tatatatagg tatgtaatgt
                                                                      1320
 atgeatatat aaaaagette eecateetee eeteeeeace ateacatett taaattatag
                                                                      1380
 acttgtaaga cttttttcca acactaacaa agtcagggtt tctcagcata acagcatctc
                                                                      1440
 acaactgete taaacettee acatgaagae agagagttea actattttat tttgeaatet
                                                                      1500
 aagggatttt tototgcact toaatcaaac tggaaaattg agaaccattt gotootatgt
                                                                      1560
 aacctctgct gaaccatgac cccaaggtct aaggagtccc cacataggat aaatgtttac
                                                                      1620
getteacgtg gecacceaga tecattititg tittigagte tggettitet giggetgaag
                                                                      1680
atataccgca gtcagcaggt aatggctgga tttgggcgcc tccattttt ttttttgctt
                                                                      1740
ccctaaaaaa tttttcatat ttgtccaggt atggtggtcg ttcaggtagt aggtaataat
                                                                      1800
gtgttgaact aaccttcttc ccattttcaa taatgggcag aatgcaagga accttactgg
                                                                      1860
cagateette getgttetgt etttgeagtg etttgetget gacataettg ggateagggg
                                                                      1920
caaagetetg tgteggggge atgaceceat tgaggtaaga eggaaggett ttgggacteg
                                                                      1980
gtgtgcgcga gttactcggt gacaaaggtt ctcttggcgg tactttggga ggcctgtctt
                                                                      2040
catcactata ggtgctcgaa gtaacttctg ctgaccatct tctataatct ggctttactg
                                                                      2100
gtctaggagg tatgggaact ctggggggaa cctcaggttt gtcttcatcg gagttaggag
                                                                      2160
aagctctgtg tatacaacag ttggatatcc ttatggctgg cttgttaaag gagccagctg
                                                                      2220
gtcccgaatg agaccttctt aatcttcggt gggtctgagg tggaggagga tttggatctg
                                                                     2280
ggacacctec cattttggtc agacacatag ctgagatctg ctgcagaaac agctggggta
                                                                     2340
tcaaaatatg catagitgat tigiccacac ccacggcaac ticgccigcc caggaacatc
                                                                      2400
atatttgaaa tcagaaagtg tagagtcttc taaaaggaag tctgtatctg agctagttag
                                                                     2460
gaattccacc tcacagtctg tgtcatccag agagaggct tcagagattg gcaacggtgg
                                                                     2520
aagaggccta gaaccccgtt cacaaagagg ggcacagggg aaaagggaag gggagttttt
                                                                     2580
```

```
<210> 3703
<211> 2903
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2904)...(1735)
<223> similar to gi5262591 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 3703

ttttttttt ttagactcaa aactttaatc agagaaccaa caaatatgca cacacggagg 60 gcgtttctac cttggcctgc agcaacacag gtgactgatt tacagactgc ccccacaccc 120 aatggetgee agtttteeat agagteeeta ttgtgteaca geeetgeaac aetttgtaca 180 etettttggt atacaacatg cecatetece egacaagaca gagetecaga ggaegggaae 240 catgtgcgag aagttaaatg ttgcaaccat ttgaaaaaca gtgtaaggcc ccaatggtta 300 gccaacaggt tcccagtttc aactaagttt aacaaacttt aaccagcaga actccaggtg 360 ccagagttga aaagcccaag ggtgcagagc actcactccc tcaccatttt cagcacctaa 420 aatatgaaag gtattcaaag tatgtgtcca gtgctttttc ataagactac tgtgtttcag 480 caaaggtgtg gactgagcca cttagtggca gggaacaaac accccagagc tgacaagaca 540 cttggtaggg aacttggttg tgtggttcca tctcactgga ctctccaaca atccttggtg 600 atcccagaac ttcctgtgac atgagggaat gtggcatttt caagatgtca cttgtcaact 660 aacagcaatc gtcgatgaaa atgggttcat ttctgattcc agaagcttca gagcagtagt 720 gcatagtgta tggatactac ccgcccccga gcctagcaaa ttgcctggtg agcggccatc 780 ctggataaat ggtgaatgat gacatcccag tggtcacttc cacacaccac aggtttgacc 840 cctaagtatg tcttccatat gggttgtttc atatgcggtt aacaccctga tcaatgcagc 900 tttcctgatg gaatccagct gtgttttggt gtcaactccc atgaaaaatt gggtgtctta 960 ttgcataacc aacactgtta aatggaggaa ggtcatagga agagggagca tgtgtttgtg 1020 ggatagggag tcctctttaa gtgagaagct tgggaggtta ggagtggaag gttgtagcta 1080 gttgaggtga agagtttaca tgttcttttt ggctttctgg ggcttaagaa aaaacccagg 1140 agagataaag ggacaaaaaa ggccaggcac ttaagaagag taaagtgctg gagaaaaact 1200 gtaaaaaagg aaaacttaaa ttaaaagcga tacattgtaa gaacattaac tacagtaaac 1260 acagattact aatteettte ttgtaacaca agtatatttg tgetataget gatgtgtatt 1320 tgtggcttac acttggtgag ccctcatgtg ctggccatca gttctaagtg cttcacattt 1380 atttatttaa teeteagaaa ageeetetga ggtaggtgat geeeatttta caqataaqqa 1440 caccgaggcc ctgagagatt tttctgacct tcccaaggtc acttaggtag tagatggcag 1500~ aggtgggatt taactcaagg tagactggct ccagagccta cctctgaatc ctgacgttgt 1560 acagettete caettttgtg ttttcattgt tataatgaaa aacatgegea caaactttet 1620 aatcaatctt tagatgcatt tatttggaga gaaactgtgc aagtgggaga gtttccaact 1680 ttcagcatcc gagtaacggt ctcatattct gggactctgc tgccacccaa tggctacagg 1740 cagtattgct gcttgttgtg tacacgctga tggcggctga ggctcgagtg gcaccgaaag 1800 getttetgge aacgttgaca etgataaagt gteteetggg tgtgaaetet eaggtgetgg 1860 ttgagatggg cacttaggac aaaagctttg ccacacaaca atacaggagt aaggcttctc 1920 ccctgtgtga attctctggg tgctgtgtta ggatttgctt tctggggcaa aaggttttcc 1980 cacatttcac cacatctgta ggggcttctc ccccagtgtg aactcttccg gtgaatagaa 2040 aggcatgage tetgggtgaa ggettteeeg catteetgae aaacataagg etttteteea 2100 gtgtgaattc tctggtggcg gacaagctca gcactcaggc cgaaggcctt cccgcagtaa 2160 tcacatacat agggettete acetgagtga attetetgat gettagaaag geatgagete 2220 tgacggaacg ttttccccgca ttcgttacac accaacggct tctttctggc atgagttcgc 2280 tcatgctgaa caaggtagtt tctctgggtg aagactctgt cacacttact acatttaaag 2340 ggattetete cagegtgaat taactgatgt tttgagaggt gtgcactgtg getgaaggte 2400 tttccgcatt cgttacattt aaaagggtgc tcctttgtgt ggaaggactg aagtttgata 2460 agggaggcac tgctgatggc tttcccttgc tcaccccatt tatacagcct cactctagag 2520 tggattettt gatggtgaat gageegagta etttggeeaa aggettteee acaetggtea 2580 cattcaaagg gcttcactcc cctggtgtga atcctctcgt gctgagttag gtatttgctg 2640 cagctaaagg ttttctcaca tttgttacac ttaaagcact tctctttctg ttctgggttc 2700 tgatccaaga tcttcccact cacaaaaaat ccttgttttt ctctggcgtg aacactctcg 2760 tggcacttca gggttgagcc gcaaatgaag cgttctccgc actcctgaca ttcatatggg 2820 gttttgacag tgtgcatttt ctggtgttgc acaaggcgat tgttatcgct gaaagtctcc 2880 ttgcattcag cacagctata ggc 2903 ·

```
<210> 3704
<211> 1738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1739)...(1512)
<223> similar to gil041038 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3704
gaaaggaggt tgggggggc aaaccttttt tttttttggt tccggggggt tttgggggtt
                                                                       60
ttcttcggtt ttggtttttg gtttttttt tcaaaaaaaa caggacgttt gggggggcaa
                                                                      120
actittitti titticccia acaagtaccc tigateigaa igggcaccag catiigigic
                                                                      180
agtattggtt tcatcattat tattattatt attattacta ttattattc ccatagccca
                                                                      240
gttcagggat gcaaaggtct ttaaaacttc tggacaatct ctggtacaat gaggtgtctg
                                                                      300
ataactgata aatcctatga tgccagatag gtgtaaaatt ttttagaatt ggcgtaatcc
                                                                      360
attatagtga cttctagctt ataaaattaa cagataccat gatttcattt tagtcatgtg
                                                                      420
ctttgataac agaaaataat taattagcat ttaatgtagt taacatattg tggtaaaagc
                                                                      480
accattagat tigittitti gtittitti titaatticc ticagtitti aaagggatac
                                                                      540
aagtttaaca ataaaaaca taaaaagcaa aaatagctcc cctttttctt gcaaggctgt
                                                                      600
tttttacccc aataatttag agtcctgggg tgaaaggact agaaaatcaa aaatagaatt
                                                                      660
ttcaacaatc tgtatcttac aaagatattt agctatccaa tgaaattgca ctttactcaa
                                                                      720
ttcaaaattc gattgttttg attgattcct gtcagtttct gtcaaaacag accatcttcc
                                                                      780
ccatttccat gtgaattttt gcgtcattgg tgaaattgtt qaaaaaatqt tqttqttqtt
                                                                      840
tttttaaatg taagtgcagc atttcaaaac ttttaaaaaaa ctgaacagta gtagtagtag
                                                                      900
tttgccattt tcggaattgt tctgcaatgt gagtggattc attgtccttg cgggccatgt
                                                                      960
tatatactta actgctgact gctgaaccaa aacaaactaa aggaacaaat aaaaaaggaa
                                                                     1020
tataactgca ttttcttttt ccaatatgtt acagaaaaac attgcccttt gactgtcccg
                                                                     1080
ttatatattg cagateteag etactacaaa agatttagtt etecatgtge etecteaatg
                                                                     1140
ctcaaggagg atcacacctg tgtgggtaaa ttcatgaaat actgtgaaac agccaggctc
                                                                     1200
cgtaaggaaa gtgtgttaca acaggaagtc agtgagcaag ggtagtcctc cgctagccac
                                                                     1260
gtcacctaat gctcacgcta ccatggaaac acttcaaatg ttacaaagcc caaccatttc
                                                                     1320
cagccccata tgagaaatta caacagtccc taaagtattt taaaaaaaaa aaaatcccaa
                                                                     1380
aaggttatgg cetttgetgt ttgaccataa tgettgetgt tteeatgtac aagttgattt
                                                                     1440
gaatcggttt ttctcccctt ccgctgatag tgaagttgta actgcgctgg gttgaggttg
                                                                    1500
cgtccatgtt acagagttga gaaggggtca ggtggtctgt ctggtggatg gtgggacgct
                                                                    1560
gcaactttta tcccaggtac caggattggt gacgtggggg aggctgcact cccttctgtt
                                                                    1620
gacgtggttt gaagctctgt gtccggcacg gcagaggcac aggccgggca atcgttgttg
                                                                    1680
geegtggeeg tggeaacatt ggggttggaa aggatgggtt ttgeacetga eetggtga
                                                                    1738
```

```
<210> 3705
<211> 1740
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<222> (1)...(1741)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (212)...(819)
<223> similar to gi4107015 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 3705
gggctgaaat ggaagagatg aatacatctg aggaagaaga gtctccgtgt ggggaggtga
                                                                       60
cgctgaaacg ggaccgttcc ttctcagagc atgacctggc ccagctccga agtgaggtgg
                                                                      120
cetetggeet geagteggee acceaecece caggagggae ggagceaeca eggeeecgag
                                                                      180
ctggcagtgc gcatgtgtgg aggcccggct cccgagacca gggtacctgt cccqcqaqtq
tetetgaece cagecaecee etaeteagea aceggggete etegggggae agaecegagg
                                                                      300
cetecatgae eccegatgee aaacacetgt ggetggagtt cagecacece gtggagagee
                                                                      360
tggcgctgac tgtggaagag gtgatggacg tgcgccgtgt gctggtgaag gccgagatgg
                                                                      420
aaaagttttt gcagaacaag gagctcttca gcagtctgaa gaaggggaag atttgctgct
                                                                      480
gctgccgggc caagttcccg ctgttctcgt ggccgcccag ctgtctcttc tgcaagagag
                                                                      540
ccgtctgcac ttcctgtagc ataaagatga agatgccttc taagaaattt ggacacatcc
                                                                      600
ctgtctacac actgggcttt gagagtcctc agagggtatc agctgccaaa accgcgccaa
                                                                      660
tccagagaag agacatcttt cagtctctgc aagggccaca gtggcagagc gtggaggagg
                                                                      720
cgttccccca catctactcc cacggctgtg tcctgaagga tgtctgcagt gagtgcacca
                                                                      780
getttgtgge agacgtggtg egtteeagee geaagagegt ggaegteete aacaetaege
                                                                      840
cacgacgcag tegecagace caatecetet acatecetaa caccaggact ettgacttca
                                                                      900
agtgacagee ceaggtggee aggeeteeag gaggeaceag geaggeeetg tateaggeta
                                                                      960
ggacgctctg agctgtgcat gtacatatat acatatatag atacatttat aatatataca
                                                                     1020
cacagtetat atatttatat acactgtttc ctggccccag ageteatttg ggttcaggcg
                                                                     1080
cacttcaaaa ccctccctgg gggaggctgt ttcttctcag gattccttgc cagggaggaa
                                                                     1140
ggggagggaa cagggtgggt tttctcactg aagagagaaa gcagaaggtt ctagatcctg
                                                                     1200
geacagactg cateceatgt teceatgete tteteegtee ecaggaatge gaacggeagt
                                                                     1260
ttcccttccc cagtggacgt ctaggtgggg acagggtatc ttggctccca gctggaccag
                                                                     1320
agtgecetge ttgectetge tetecetttg tggggaetea ggeageagag geatetggga
                                                                     1380
agtetetgag taggeagggt ceteetggga ggeaceecea eetgtttgaa aggtetngee
                                                                     1440
aggcgtggtg gttcaggcct gtaattccag cactttggga ggccgaggag ggaggatcac
                                                                     1500
ctgaggtcag gagtttgaga ccagcctggc caacatgatg aaatgttgtc tctactgaaa
                                                                     1560
atgcaaaaat tagccaggta tagtggcagg aacctgtaat cccagctaca ggggaggctg
                                                                     1620
aggcaggaga atcgcttgaa cccgggaggt gtaggttgca gtgagccgag attgcaccac
                                                                     1680
tgcactccag cctgggcgac agagcgagac tctgtatcaa aaaaaaaagt tgcggggggg
```

```
<210> 3706
<211> 3115
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3110)...(557)
<223> similar to gi6002714 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

3115

tgtacttgag tecegegeeg aagteetteg ggeeeettee geeettgega egaaa

```
<210> 3707
<211> 3977
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1940)
<223> similar to gi4240183 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3707
gttaggtcct tgggcagaaa atgatcattt aaagaaggaa acctcaggtg tggtcttagc
                                                                       60
actitetgea gagggteete etaetgetge ticagaacaa tatacagata ggetggaact
                                                                      120
ccagcctgga gctgctagtc agtttattgc agcgacgccc acaagtctaa tggaggcgca
                                                                      180
ggcagaagga ccccttacag cgattacaat tcctagacct tctgtggcat ctacacagtc
                                                                      240
aacttcagga agctttcact gtggtcagca gccagagaag aaagatcttc agcccatgga
                                                                      300
gcccactgtg gaactttact ctccaaggga aaacttctct ggcttggttg tgacagaggg
                                                                      360
tgaacctcct agtggaggaa gcagaacaga tttggggctt cagatagatc acattggtca
                                                                      420
tgacatgtta cccaacatta gagaaagtaa caaatctcaa gacctgggac caaaagaact
                                                                      480
tcctgatcat aatagactgg ttgtgagaga atttgaaaat ctccctgggg aaactgaaga
                                                                      540
gaaaagcatc cttttagagt cagataatga agatgagaag ttaagtagag ggcagcattg
                                                                      600
tattgagatc tectetece caggagattt ggtaattgtg gaaaaggate acteagetae
                                                                      660
tactgaacct cttgatgtga caaaaacaca gacttttagt gtggtgccaa atcaagacaa
                                                                      720
aaataatgag ataatgaagc ttctgacagt tggaacttca gaaatttctt ccagagacat
                                                                      780
tgacccacat gttgaaggtc agataggcca agtggcagaa atgcaaaaaa ataagatatc
                                                                      840
taaggatgat gacatcatga gtgaagactt gccaggtcat caaggagacc tctctacttt
                                                                      900
tttgcaccaa gagggcaaga gagagaaaat cacccctaga aatggagaac tatttcattg
                                                                      960
tgtttcagag aatgaacatg gtgccccaac ccggaaggat atggttaggt catcctttgt
                                                                     1020
aactagacac agccgaatcc ctgttttagc acaagagata gactcaactt tgggaatcat
                                                                     1080
cetetecagt ttetgcaaaa gaaaagetee tecaaaagaa ageetateag ceagacetag
                                                                     1140
tcaagcttct ggtggaaaaa agacaattca agtccttcct tggcgacctc tcaagtgcct
                                                                     1200
ctgataaatt gctagaggag aaactagcta ctgttcctgc tcccttttgt gaggaggaag
                                                                     1260
tgctcactcc cttttcaaga ctgacagtag attctcacct gagtaggtca gctgaagata
                                                                     1320
getttetgte acceateate teccagteta gaaagageaa aattecaagg ceagttteat
                                                                     1380
gggtcaacac agatcaggtc aatagctcaa cttcgtctca gttctttcct cggccaccac
                                                                     1440
caggaaagcc acccacgagg cctggagtag aagccaggct acgcagatat aaagtcctag
                                                                   ~1500
ggagtagtaa ctccgactca gaccttttct cccgcctggc ccaaattctt caaaatggat
                                                                     1560
ctcagaaacc ccggagcact actcagtgca agagtccagg atctcctcac aatccaaaaa
                                                                     1620
caccacccaa gagtccagtt gtccctcgca ggagtcccag tgcctctcct cgaagctcat
                                                                     1680
cettgeeteg caegtetagt teeteaceat etagggetgg aeggeeeeac catgaceaga
                                                                     1740
ggagttegte eccacatetg gggagaagea agteacetee cagecactea ggatetteet
                                                                     1800
cctccaggag gtcctgccaa caggagcatt gcaaacccag caagaatggc ctgaaaggat
                                                                     1860
coggoageet coaccaccae toagecagea ctaaaaccce ccaagggaag agtaagecag
                                                                     1920
ccagtaaact cagcagatag gagccaggct gcatctcttt gaaaggtgtg agatcttcct
                                                                     1980
cctaaacctg atgcatgtgt gtccctgtac tttctatgta aaaaaatcag tgttgatctt
                                                                     2040
ctcttgcaaa agaaagtaac atgatcaatt atttataaga agacataata catgataagg
                                                                     2100
aattacctaa ggcagggcag caagtagatt aggaatcaat gtctttgtac aagaaggaaa
                                                                     2160
aatagagcaa aaatccaagg gggagaaact cattaaaatg agctctcatt ttttaagctg
                                                                     2220
```

```
cctttgaaac aaaagagttg aggataggag atagaatgga attttagggg ggttgcctaa
                                                                   2280
tttttttaag cctcaattca aagattatat agcaaaagtg aaacttcttg tttgatattt
                                                                   2340
tcattcaaaa ctttcccacc ctgaagagtc attgatcaga tattagatta tataagaagt
                                                                   2400
ctgttgccag ggagccagta ttcatgtata tttggcttgt gtgtttattt cgtgtattga
                                                                   2460
gaatgaacac ctttactttg cctcattcct agtaccctcc ctggagttca gattttttt
                                                                   2520
taaaattttg tatgtetegt etgatteaat etetetgett ttattttatg gteetagttg
                                                                   2580
tactatcaaa tccaattact tttttttagg tccccctgat ttttttttt tagagcaaga
                                                                   2640
2700
gtctaactag agctattttg caggctttag tgtttaggga gagaaagaaa gtgtgggtta
                                                                   2760
atagcettea agatagaaga tgeeetttea tetetgttaa gtgteeteet ttagaaaett
                                                                   2820
gagtagaagg aaaactgacc agagtagact gcttccttaa gtcttctggg ttccaactgt
                                                                   2880
ttgtaatatc agcatccaag atgatacgag ggaagcacaa tgctttggac tgtgatttga
                                                                   2940
gatttagaaa taaattagat atattattga ggcttagaat cctcaaactt tgtattttat
                                                                   3000
acatttagcc aataaggaat taatatctgg ggaaataaat ttaggcaaat atttctttt
                                                                   3060
taatgtttta ttacctgctt ctcctgtgtt ttagttcaac atttgggctt cttggcctga
                                                                   3120
ttttcataca atctcaattt acgaagctgt aaagaggaag atatttgttc taatctcact
                                                                   3180
cttctaatag gaatcaggca aatgaaagtc taccagactt ttaaaatggg ctgttttat
                                                                   3240
actctctagg tgttttgtgt tgtaaagacc ttattaaggt caggtaaatt ggtctgcttg
                                                                   3300
ctgttgaaat ttgccttcta gcaaacatat gtgctttctg ttccaccttg ctgtttgctg
                                                                   3360
ccaaacccaa tacagttcaa ttgggaaaca aaaaaaaaag aaaggaatac atttcctccc
                                                                   3420
caagtgaaca tettetaatg etgeateaaa getgeeetga agetgeactg aacttetett
                                                                   3480
gttctcttta tctggggtga gctttttaaa aaaacaaact caaaacacta ttgaggcata
                                                                   3540
taacgtetet tataagaaat gtageatagt gtggaatett aatttetete cagttteaaa
                                                                   36001
cactccagag gaatgcaata gataagacat acttgctgtt tatctaaagc aactgtaata
                                                                   3660
ttggaagate agteettetg tattatattg tataatagtt getataacae tacttgeatg
                                                                   3720
tottoatggt aaattatata aatatttata aatatataga gagacatato ottatataga
                                                                  3780
gtcattcttt gtcattctcc atttgtaatt tcgagatcac agatggcgaa attccttttc
                                                                  3840
tattgtgtgc ctcatgtaca cttgggcctt gcctatcttc attttcttga actatgttct
                                                                  3900
tggcatgtga cacctcagag tettettgee ttecetgtgt acaatgcaag ggtgggcagt
                                                                  3960
atttaacaag.ccaagaa
                                                                  3977
```

```
<210> 3708
<211> 2215
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2217)...(2020)
<223> similar to gi19917 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3708

ttttttttt ttcctgagac agcagagcat aagtcctttt aattatgtgt ttgaaaaatg 60
tcacaagtca aaaaaggaac acaaggcagg ctccggctcc ctccacccc gtgaggagcc 120
cttgtccatt tcagccttgc actcagaaag accccggggg gtctgtgtac gttccacgtg 180
cttcatgttt cgtggtatct gtcagagcct taaaacaggg cccacccact actgtgaaat 240
ttcaaggaaa taactgattc agttaaataa cagtcccaag gtagacctgg tctcacaggt 300
gaccacccgc ttaaatccag agccttcttt tctgtccaaa gccactgaaa tttgatctcc 360
tccttcacac attcccaggt ccccaatatg ccacccacct tctgacaggt ggctacaggt 420
```

```
ctacactaat ggaagctctg ctaaaaacat ctccacccaa ccctcctgcc aacgaggtca
                                                                      480
gctggcaggc atctgctaag cccctaaact ggtcagcgca ggttatgcgc ccattccgag
                                                                      540
acccaaacaa tactccagga cttcgcacct cctcctcgag aggcaacgga gagaactgct
                                                                       600
cttacttcaa tctgacagtc aagggagagc acacaaataa aacgtcccat ctggaagaaa
                                                                      660
tcagggaagc tggggaaatg aggctgttca tcaactttta agagctcaaa cttggctgtg
                                                                      720
taactttcag acctagetta tggttgggga ccacetgaac tggeecccag ggttgeetet
                                                                       780
ctctcaacac aaggtgcata ctgaaccctt ctgcagtgta gtacacgttg ctgccgcaag
                                                                      840
tgcaaaggcc acgagggaaa gaccttttaa ccagagcaag gggaatctga aatgccagaa
                                                                      900
gggggaaggt cggttcgcct gaagacctct tctggcctgt gtggaaagga cggcccttg
                                                                      960
tcaaccetgg ggaagcactg cagatgtgaa geggtttgge caetettggg caetgaetga
                                                                     1020
gggtgatgaa cgaggaaggg agcaagagct gaaggcgagg agagcgctag gaggcaggga
                                                                     1080
acctggagcc aggggctgcc tggcagggct ttaggctgaa gcccccaaag cgtagttccc
                                                                     1140
ttcactggct caaacataaa aggaaccaaa ctgtttgggg aaaaaggcca ccctctggcc
                                                                     1200
tttcaaaaca ttctctcaca attctatgcc atatgagtgc aggcttaatt cgtccagtga
                                                                     1260
attotatgoa aatgittoaa gaagotgotg ttaacaggaa caatgigtac ciggiacaca
                                                                     1320
ctgatcctat gggggtggga ggaggagag ggaaggaagc aaagaggagc cgcctccctt
                                                                     1380
cctactgtgc tcttcagatc tgtcagtggg gccgggcgca gcagatggcc ccctccccag
                                                                     1440
aggcagggga gagtcctcca ccccctctgc agcctccagg agcattctga cttccaccag
                                                                     1500
caggcactee agttattatg catetagaca tatggateta cacgaggaac ecceggegea
                                                                     1560
gccaagetet gegetggete eegeacagge gaagegegeg cageageaca ggageeege
                                                                     1620
ecctgcaget tgacgagetg agetggggte cacaggaace acgeeccaag gagegtttgg
                                                                     1680
ggatggtagt ggggagacag gccattggct tccccctctt tctaaggaag tcagcctcac
                                                                     1740
tctactcctt ggggatttcg aacatgcaga ggctcttgta cttttgcaga agctcattct
                                                                     1800
tggtcctgac ttgctcccgg aggctctgca gctgctgctg ctgctgttcg gggctcaggt
                                                                     1860
ggatgccggg catggtgctg atgagcttgc gcatctcctg gaacttgctt ttgagggcgt
                                                                     1920
tcaggtcctg gtggacctcc gggctgtcct tgtccatgca tttgatgatg ttgtgaacca
                                                                     1980
aaggtaaaaa ggagtagtte tetteeteee tegegeggge aggtgaetga ggeegtggeg
                                                                     2040
ccggcgactg ctgcggttga ggcgcaggga ccggcggcgg ctgaggaggc ggcagcggct
                                                                     2100
tggtgtcagg cagegeetgg teggaegttg geggeaatae atecteegee tgtegeeegg
                                                                     2160
ctgccacccc agcagaggcc atggctccgg gggtaggtta gccagaggtc gggtc
                                                                     2215
```

```
<210> 3709
<211> 1555
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1557)...(261)
<223> similar to gill85452 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 3709
gacccccggg gttttcccct ccccgccgtg ttaaaccgcc ggccccggaa ttgaattagg 60
gggccccaa aaaaaataa tacctttccc gcccccggca ctaaaatttg gttctttaaa 120
acggcccccc ccttttttt tttttgatg ctgtgacttt tattctaata cacacattga 180
tttgattaaa ccaagttcag ggataaggca aatatacatt cttgttcccg aaaacatccc 240
aggcagtttc agcgtctttc agcacagatg aggtagggtt ggggctgcaa tgtcatgcct 300
aacctgggct tcagatctgg aactagttca tgtggaaaat gcaaatgaaa cctctgaagc 360
aatgctgtaa aaaacaagaa catttccatc cgagccaagt gttctcccaa ggacaatgtc 420
```

```
ttcttcctag ggggaaaaag ggaacccaaa gcttcccttc ttggggccaa aatatcccac
                                                                      480
tgctggtccc aggaaatcgc tcagggatgg ggaacacttt ctggggggtct tctcccggta
                                                                      540
cttttttcca tccaaggtgg tacaggaatt aaggtttgta attacttgtt gtgcctttag
                                                                      600
gaatggaata accacgtaca actgcatctt cagaggttgc atggaaaatc cctaatggaa
                                                                      660
ctatattaca gaatcttaaa acttcatgca aaactgcctc agtataaggc attttgcatt
                                                                      720
tgtcgtccca agaaggcttc ccattagggc ccataattaa atcaatctct ttctgaactt
                                                                      780
gtccttgaat attaggataa agggccatga aaagaatcgc ccaccgtagc acattggttg
                                                                      840
tagtttcagt tccagcaatg atgagttcac ccactgagaa aattaggttt tctttggaga
                                                                      900
aagtagatga tgggtcattt ttaccttgat ccatctcatc taaataagca tcaacaaaat
                                                                      960
gctgaggtag ctgaggcttt ctgttgactg aagctttttc aatgagtctg gagagaaaat
                                                                     1020
catagactac agetgteatt tectaaacag etgttgatgt tttecaaaag geaggatgee
                                                                     1080
aatccatgga aaggcattat acaagaagac tgaggcactg gcagctagtt ccacattttc
                                                                     1140
actaaataac tcaatcatgt gctgaaaatc ggtgtcttca taagtgaatc gttctccaaa
                                                                     1200
aatgatcaga ttggttatgt ttgaaacagc attcgttatt aactgtttaa agtcaaaagg
                                                                     1260
totacetttg tatgtttcaa tagcatcatt gaaaaatttg gtttcttcca agattttaga
                                                                     1320
ttcaaaagac ttttggccat atccaaaata tcgaaaactg tttacagcta atcgtctgtg
                                                                     1380
atcaacccat cctcggccat atctggaatt gagtaagcct cccatttttg tcatcttcat
                                                                     1440
gaataaagga aggcatggtc tgtctgcaaa aatttcgctt tgatgaacaa ggcattcctt
                                                                     1500
tactacatca tagccattta caaccacagt tgatatgcct ccaagatcta gactg
                                                                     1555
```

```
<210> 3710
<211> 3219
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (3220)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1) ... (2744)
<223> similar to gi4927370 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 3710
atgecegeca tgecetecag eggeceeggg gacaccagea getetgetge ggagegggag
                                                                       60
gaggaccgaa aggacggaga ggagcaggag gagccgcgtg gcaaggagga gcgccaagag
                                                                      120
cccagcacca cggcacggaa ggtggggggg cctgggagga agcgcaagca cccccggtg
                                                                      180
gaaagcggtg acacgccaaa ggaccctgcg gtgatctcca agtccccatc catggcccag
                                                                      240
gactcaggcg cctcagagct attacccaat ggggacttgg agaagcggag tgagcccag
                                                                      300
ccagaggagg ggagccctgc tggggggcag aagggcgggg ccccagcaga gggagagggt
                                                                      360
gcagctgaga ccctgcctga agcctcaaga gcagtggaaa atggctgctg cacccccaag
                                                                      420
gagggccgag gagcccctgc agaagcgggc aaagaacaga aggagaccaa catcgaatcc
                                                                      480
atgaaaatgg agggctcccg gggccggctg cggggtggct tgggctggga gtccagcctc
                                                                      540
cgtcagcggc ccatgccgag gctcaccttc caggcggggg acccctacta catcagcaag
                                                                      600
cgcaagcggg acgagtggct ggcacgctgg aaaagggagg ctgagaagaa agccaaggtc
                                                                      660
attgcaggaa tgaatgctgt ggaagaaaac caggggcccg gggagtctca caaggtggag
                                                                      720
gaggccagcc ctcctgctgt gcagcagccc actgaccccg catcccccac tgtggctacc
                                                                      780
```